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87-195

Supreme Court, U.S.
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No. ____

IN THE SUPREME COURT OF THE UNITED STATES

October Term, 1987

ANNA PENK, ET AL, Petitioner,

v.

OREGON STATE BOARD OF HIGHER EDUCATION,

Respondent

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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VOLUME III

her inability to work well within the library. As the comments in the annual review of 1969-70 indicate, personality problems were evident even then:

> She is often too concerned with trivial things and tends to be too easily excited and sharp in speaking to a subordinate. She realizes her problem and has made real efforts to improve. (Ex. 3776(e)).

The annual review of 1971 contains these comments:

> Ms. Schreiner's weakness is in her relationships with others. She is impatient and quite explosive. Though she gets over her anger quickly, others may stay offended at her for a long while as a result of sharp words. I believe that her relationships with the public are good. (Ex. 3776(e)).

In March, 1976, then - University Librarian H. William Axford wrote in his review that Ms. Schreiner

> . . . has not, to date demonstrated the potential to develop those [attitudes] necessary for a minimally

acceptable performance on an AAU university library faculty. (Ex. 3776(e)).

The annual review of 1978 contains these comments by Holway Jones, her supervisor:

> I find Lois Schreiner somewhat of an enigma. I suspect some of her attitudes arise in deep scars long borne from a personal past. She has had to fight for position in this world. She continues to fight for what she sees as her rightful place professionally. . . . (Ex. 3776(e))

In 1979 Holway Jones wrote in part:

> The fact of the matter is, Lois, that your own perception of your value is probably higher than most others around you. If this is a "come-down," you will have to live with that. You have many fine qualities as a librarian and as a person, but I am not always confident in your judgment. (The recent decision about storing some USSD pamphlets in vertical files is an example.) Your often literal interpretation of rules and regulations often disturbs me, as well as your failure to see the big picture, the overview,

which is, in my judgment, so essential . . .[2] (Ex. 3776(e)).

In the academic world, where across-the-board percentage increases and merit pay determine one's salary, it is reasonable that Ms. Schreiner, with the kind of reviews that she received, would have a lower salary than most of the assistant professors in the U of O library. Even with these reviews, however, she received "equity" pay increases in 1979 and 1980. She took an early retirement, effective January 1, 1983.

The court concludes that Ms. Schreiner's failure to advance in salary to her satisfaction and expectation is due to her generally average performance and to her abrasive personality and not to sex discrimination.

Lastly, Ms. Schreiner asks the court to find that Mr. Stave is an appropriate comparator with her and to find that she was entitled to be paid the same as he was paid when he was hired in 1979.

While Mr. Stave performed tasks substantially similar to Ms. Schreiner when he was working within the library, he had different responsibilities than she had. He had personnel responsibilities and he was held accountable as the head of that area of the library. He received his degrees away from the U of O. He also worked for the Library of Congress for six years so that he brought with him experiences which Ms. Schreiner did not have. The court concludes that Mr. Stave is not an appropriate comparator for Ms. Schreiner and that his higher salary was not based on sex discrimination but was based on

his prior experiences and the responsibilities that he had within the library that Ms. Schreiner did not have.

Ms. Schreiner cannot prevail on her individual claim.

Schreiner Footnotes

1. Since Ms. Schreiner did not apply for the position, no one will ever know whether she would or would not have been selected for the position by the search committee.

2. The court does not intend to imply that the entirety of Ms. Schreiner's evaluations are negative. Ms. Schreiner was lauded for her attention to detail, her work in document pro cessing, and her courtesy to patrons. The court has noted only the consistency of negative evaluations among several evaluators which leads the court to find that Ms. Schreiner was overall an average librarian whose ability to work harmoniously with her colleagues was limited. Her salary reflects this status.

DR. RUTH WAUGH

Dr. Ruth Waugh, an associate professor of education at the University of Oregon (U of O), claims that she was discriminated against because of her sex in that (1) she was paid less than equally qualified men who were performing substantially the same jobs as she performed; and (2) she was assigned practical supervision courses, which are more burdensome and have less status than regular teaching positions and which take so much time that the writing and research necessary for professional advancement cannot be done. Dr. Waugh intervened in this action as a named plaintiff without filing a charge of discrimination with the Equal Employment Opportunity Commission.

Dr. Waugh received a B.A. degree in education from Southern Oregon State

College in 1957; an M.S. degree in special education from the University of Oregon in 1963; and a Ph.D. degree in special education from the University of Oregon in 1971. Before she came to the U of O, Dr. Waugh had been an elementary school teacher for nine years.

Dr. Waugh was recruited by the U of O School of Education in 1963 to be the administrative head of the DeBusk Memorial Center, a laboratory-type, special education school in the College of Education. In addition to her administrative responsibilities, Dr. Waugh also taught and supervised U of O students who in turn diagnosed, counseled, and taught children who came to the DeBusk Memorial Center seeking special education services. Dr. Waugh held this position with the DeBusk Memorial Center until 1973. From 1973

until the present, Dr. Waugh has been a regular teaching faculty member and most recently, the acting chair of the area of special education. In 1982, Dr. Waugh entered into a tenure reduction agreement with the UofO which provides that in exchange for an extraordinary salary increase she will retire no later than June 15, 1985. Dr. Waugh has no complaint regarding the conditions of her retirement.

Dr. Waugh was in the rank of instructor from 1963 to 1966. In 1966, she was promoted to the rank of senior instructor and granted tenure. In 1971, when she completed her Ph.D. degree, she was promoted to the rank of assistant professor. In 1974, she became an associate professor. Dr. Waugh has never applied for a promotion to the rank of

full professor. She has no complaint regarding her rank status.

Dr. Waugh has been very active in committee work in the College of Education and throughout the University. She has served, for example, on the prestigious Faculty Personnel Committee, which is comprised of eight members elected by the entire U of O faculty, and on the Advisory Council of the College of Education, an elected position in her own discipline. Dr. Waugh has published at least fourteen articles in refereed journals and has written many other professional papers. Her teaching skills are rated above average. During the 1972-73 academic year, she studied on a post-doctoral fellowship in Yugoslavia. During the summer of 1973, she returned to Yugoslavia, taking with her students from

the UofO who she felt would benefit from the foreign study. During the summer of 1974, she taught at the University of British Columbia.

Dr. Waugh is an excellent faculty member. Dr. Robert Gilberts, who has been Dean of the College of Education since 1970 testified as follows:

> Q [By Mr. Lidz] Would you tell me -- describe to the court overall how you evaluate Dr. Waugh's performance as a faculty member at the University of Oregon?
>
> A I consider her to be one of our outstanding faculty members on any count. She has been a major contributor in all of her positions all the way through and is currently -- I hate to use the word going out, but sort of going with a blaze of glory, having gotten a number of new grants, training grants, and clearly she is -- she is first class.

(Tr. 11,927).

SALARY CLAIM

Dr. Waugh contends that she has been paid a lower salary than three equally qualified men who perform substantially the same job as she performs in the College of Education. The men are James Booth, Dr. Knute Espeseth, and Dr. George Sheperd.

The salary histories of Dr. Waugh and her comparators from 1977 through 1983 are as follows:

NAME	1977	1978	1979	1980	1981	1982	1983
Waugh	$18,673	$20,175	$20,175	$22,188	$24,225	$26,963*	$30,238*
Booth	19,031	20,883	20,883	22,960	25,068	***	-0-
Espeseth	21,814	23,480	23,480	25,241	27,558	27,558	30,241
Sheperd	22,063	23,986	23,986	25,785	28,153	28,153	30,850

* Includes 6% increase for relinquishing tenure as part of early retirement contract.
** Includes a 5.3% increase for relinquishing tenure as part of early retirement contract.
*** Died of a heart attack.
(See, Pl. Ex. 900).

Factors which can be quantified and which are known to affect salary levels include length of service to the institution; department or discipline; degrees earned and the years they were received; and rank. These factors and the years of birth of Dr. Waugh and her comparators are as follows:

Exhibit

NAME	DATE OF BIRTH	DEPT.	YEAR OF SERVICE	DEGREE/ YEAR	RANK/ YEAR
Waugh	1920	Div. of Teacher Education	1963	Ph.D. 1971	Assoc. Professor 1974
Booth	1921	Div. of Counseling	1962	M.A. 1956	Instructor 1970
Espeseth	1932	Div. of Teacher Education	1965	Ph.D. 1965	Assoc. Professor 1969
Sheperd	1933	Div. of Teacher Education	1966	Ph.D. 1965	Professor 1977

Factors which are difficult to quantify but which affect salary levels are quality of performance; publications; and departmental, campus, and public service. Beginning salary is also a very important consideration because of the across-the-board percentages of salary increases given by the Board.

Since Dr. Waugh has earned less than each of her comparators throughout her career, the court must first determine whether Dr. Waugh's comparators perform substantially the same job as Dr. Waugh.

JAMES BOOTH

Mr. Booth (now deceased) and Dr. Waugh were both hired as instructors, he in 1962 and she in 1963. Both had M.A. degrees. His area within the School of Education was counseling and educational psychology; her area is special education. Both were promoted to the

rank of senior instructor in the mid-1960's. Dr. Waugh obtained a Ph.D. degree in 1971 and, thereafter, acquired the ranks of assistant professor and associate professor. Mr. Booth never obtained a terminal degree, and he had remained at the rank of senior instructor throughout his career at the UofO. Mr. Booth had not done scholarly research because his position as senior instructor did not require him to do so. Dr. Waugh has published extensively because her positions as assistant professor and then associate professor require her to do so. Mr. Booth had not been actively involved in faculty governance. Dr. Waugh has been extensively involved in faculty governance, both within the School of Education and the overall University. Mr. Booth had been active as a consultant to community, social

service organizations and was a valued faculty member.

Dr. Waugh has better academic credentials than Mr. Booth. Academic credentials, however, are unimportant if job content differs. Since there is no direct evidence before this court of sex discrimination against Dr. Waugh, Dr. Waugh must show that she and Mr. Booth performed substantially the same work for this court to infer sex discrimination from the differences in their salaries. Spaulding v. University of Washington, 740 F.2d 686, 700 (9th Cir. 1984).

Dr. Waugh and Mr. Booth came to the UofO School of Education from different educational disciplines: she from elementary school education; he from vocational and occupational rehabilitation and education. Dr. Waugh

became a member of the Division of Teacher Education in the School of Education. Mr. Booth became a member of the Division of Counseling and Educational Psychology in the School of Education. From 1963 until 1974, Dr. Waugh was the director of the DeBusk Memorial Center and a full-time teacher in special education. During approximately this same period of time, Mr. Booth was developing a program for selecting, training, and placing VISTA volunteers throughout the United States. He also spent a year or two designing and participating in the training of indigenous people such as the Pit River Indians in California. For at least two terms during this time period he served in the School of Community Service and Public Affairs rather than the School of Education.

Dr. Waugh was asked on direct examination about Mr. Booth's job content.

Q [By Mr. Willner] What were Mr. Booth's duties during that period of time?

A From 1962 and 1963, he taught one course, practicum in rehabilitation. So his responsibilities were to supervise practicum, and for six years he worked with VISTA, to train VISTA volunteers. Then for a year he worked at the Community Service and Public Affairs Department and worked the rest of the time counseling faculty members, according to the information I obtained from the University catalog and from his vita.

Q Did a period of time come when he became director or coordinator of the DeBusk Memorial Center?

A Yes, in 1978, he lists that.

Q And was that 15 years after you had that responsibility?

A Yes.

Q Did Mr. Booth ever have teaching responsibilities?

A He taught one course the first two years that he was there. Then when he worked in VISTA he lists his responsibilities as program coordinator. So my assumption is that that involved some teaching of the VISTA trainees, and then he taught introduction to counseling; he also taught supervised practicum and that is considered a course.

Q Was he teaching University of Oregon students?

A During the VISTA years, no. They were volunteers who came to the University for training. VISTA was somewhat tangential to the administration of the University, it was one of the War on Poverty efforts.

Q Were the students that you were teaching and supervising University of Oregon students getting their degrees?

A Getting primarily Masters Degrees and Doctors Degrees.

(Tr. 2,046-047).

On cross examination Dr. Waugh testified as follows:

Q [By Mr. Lidz] What department was Mr. Booth in?

A In the counseling department within the college of education.

Q That's a different department or division depending upon the organization than you've been in?

A Yes, that's right.

Q You've never been in the counseling division or department?

A That's correct.

Q You mentioned that Mr. Booth was the program coordinator for the VISTA program; is that correct?

A That's what he had on his vita, yes, and in the university catalog that's also listed there.

Q And do you know what he did in that position?

A I imagine he was the program coordinator who had some responsibilities for the training.

Q He would be responsible for training students?

A Training the VISTA volunteers who were receiving

training at the University of Oregon.

Q And what would they -- what were they being trained to do?

A They were being trained to go out into poverty areas in the United States and perform a variety of activities to help individuals raise themselves out of their poverty level.

Q Do you know how the VISTA training program came to be associated with the University of Oregon?

A It was federal money obviously and a grant was written to obtain the money.

Q Was it a federal grant that paid his salary during those years?

A Yes, I believe so.

Q Do you know how large the grant was?

A I don't know the size of the grant. The people who came for training have stipends, I believe, but I don't know the size of the grant, no.

Q Do you know how many people were trained?

A I do not.

Q You mentioned also that Mr. Booth had an appointment in the School of Community Service and Public Affairs in 1972?

A That's correct.

Q You have not had an appointment in that school or college, have you?

A No.

Q And that school or college is completely distinct from the College of Education, is it not?

A Yes, it is.

Q It's not a subdivision of the College of Education?

A No. It no longer exists.

Q And can you tell me anything more about Mr. Booth's duties as VISTA coordinator?

A No, I cannot. For three years he's listed as program coordinator and for three years he's listed as evaluation coordinator.

Q You're answering off his vita; is that correct?

A Yes, that's correct.

Q Not of your own personal knowledge?

A Right.

Q During the time that he was director of the VISTA training program or coordinator of the VISTA training program, you didn't have any responsibility for the VISTA training program, did you?

A No.

Q So there was really no comparability in your duties during this period of time, was there?

A No. The students were not university students.

Q You weren't teaching the same students; you weren't in the same program?

A Right.

Q He was on soft money; you were on hard money?

A Right.

Q He was administering a grant?

A He was the program coordinator, evaluation officer. Ray Lowe is listed as the administrator or director

of the grant throughout the entire time it was listed at the campus.

Q You have never been in the same department as Mr. Booth in all the years you've been at the University of Oregon?

A No, I'm not a counseling person.

(Tr. 2,122-125).

During the time Mr. Booth was coordinator of the VISTA training program and assigned to the School of Community Service and Public Affairs, he was not an appropriate salary comparator for Dr. Waugh. Dr. Waugh's students were UofO students; Mr. Booth's were not. Dr. Waugh's salary was funded by the UofO and subject to that institution's budget; Mr. Booth's salary was funded by federal grant moneys. Most importantly, their jobs were different.

From 1978 until his death in 1982, Mr. Booth was Director of the DeBusk

Memorial Center. This is the same position that Dr. Waugh held from 1963 to 1973. In addition to being Director of the DeBusk Memorial Center, Mr. Booth taught in the Division of Counseling and Psychology within the College of Education. Mr. Booth taught such classes as Marriage Counseling; Ethical, Legal and Moral Issues in Counseling; Medical Aspects of Disability; Cross-Cultural Aspects of Counseling; and Disability and Mental Health.

From 1978 until 1982, Dr. Waugh was a regular teaching faculty member in the Division of Teacher Education within the College of Education. She was heavily involved in grant-funded research and writing as well as teaching. This court cannot say that the positions of Dr. Waugh and Mr. Booth were substantially the same from 1978 to 1982. Nor can the

court determine that their backgrounds and prior experiences were so similar that they should have been paid equally during those years. It may be that Dr. Waugh "should" have been paid more than Mr. Booth. Decisions about salary allocations, however, rest with the College of Education unless sex discrimination is involved.

There is no direct evidence of sex discrimination against Dr. Waugh. She was actively recruited by the College of Education; she has been voted and appointed to positions of leadership in the College; she has received substantial merit and equity increases; her work has been praised by administrators within the College.

The testimony of Dr. Fay Haisley, associate dean for the Division of Teacher Education, suggests that the

likely cause of the differences in the salaries of Dr. Waugh and Mr. Booth between 1978-1982 is that Dr. Waugh was in the Division of Teacher Education and Dr. Booth was in the Division of Counseling and Psychology. Dr. Haisley testified as follows:

> Q [By Mr. Willner] . . . [H]ow does the salary of teachers in the Teacher Education Division compare with teachers in other divisions?
>
> A I don't have data on that, but my best guess would be that it's generally lower.
>
> . . .
>
> Q Well, Dean Haisley, do you have any basis for such an opinion other than a guess? The word guess is not a word -- you can't guess in court.
>
> Do you have any additional basis for that or based upon your reading literature and your knowledge and your consulting work?
>
> A My knowledge would be that, yes.

> Q And what would your knowledge be?
>
> A My knowledge would be that faculty members who teach in colleges of education that deal with the preparation of pre-service teachers are paid a lower salary.

(Tr. 2210).

Concerning her own salary, Dr. Haisley further testified that as Associate Dean for the Division of Teacher Education her salary was lower than the salaries of the associate deans for the Division of Educational Policy and Management; the Division of Counseling and Educational Psychology; and the Division of Special Education and Rehabilitation. Dr. Haisley claims that the reason her salary is lower than the other three associate deans -- all men -- is that the Division of Teacher Education trains public school teachers and "about 70 to 80 percent [of public

school teachers are] female." (Tr.2191). Dr. Haisley claims that her salary and Dr. Waugh's salary are low because 75 to 80% of the students in the Division of Teacher Education are female, while the students in at least some of the other Divisions are predominantly male. Dr. Haisley does not contend, however, that the positions require substantially the same skills, effort, and responsibility. Without evidence of job con tents, these are comparable worth complaints, which are foreclosed by the Spaulding case and the court's order of August 10, 1984.

Dr. Waugh has the burden of proving that her position and Mr. Booth's position are substantially equal. She has failed to do that. Therefore, Mr. Booth is not an appropriate salary comparator for Dr. Waugh.

DR. SHEPERD

Dr. George Sheperd received a B.A. degree in English in 1955 and an M.A. degree in special education in 1958, both from Colorado State College. He received an Ed.D. degree in special education from the University of Illinois in 1965. (Dr. Waugh received a Ph.D. degree in 1971.) Dr. Sheperd came to the UofO College of Education as an assistant professor of education in 1965. (At that time Dr. Waugh had been there two years as an instructor.) In 1968 Dr. Sheperd became an associate professor. (Dr. Waugh was a senior instructor and became an assistant professor in 1971.) In 1974 Dr. Sheperd became a full professor. (Dr. Waugh became an associate professor in 1974 and has never become a full professor.)

Dr. Sheperd's special interest and expertise is in talented and gifted

education. He is the head of the Talented and Gifted Program, which he was instrumental in developing. Dean Gilberts, Dean of the College of Education, testified that Dr. Sheperd's research and scholarship are about equal to Dr. Waugh, and he has been active in departmental and University affairs, although perhaps not as active as Dr. Waugh.

Dr. Sheperd's starting salary in the 1965-66 academic year as an assistant professor with a terminal degree was $9,000. (Dr. Waugh, who had no terminal degree and was an instructor, had a salary of $7,000 in 1965-66.) Dr. Gilberts explained the differences between the salaries of Dr. Waugh and Dr. Sheperd as follows:

> George's [Dr. Sheperd] background in terms of experience in the public

schools is more or less equivalent to Dr. Waugh's, but he had the advantage of a six- year start and one promotion before Ruth began in the rank of assistant professor. His early years were really quite productive in terms of publications.

Ruth's later years, as I indicated yesterday, have been very productive in scholarship, and so I think those factors, the earlier placement on the schedule, coming in with a doctorate to begin with, and as an assistant professor, definitely had an effect on relative placement in terms of salary placement.

That combined with very spotty and limited salary increases that were allowed over a period of time has an effect as well.

(Tr. 11,940-941).

Assuming, without deciding, that Dr. Sheperd is an equally qualified man who performs substantially the same job as Dr. Waugh, the salary differences between Dr. Waugh and Dr. Sheperd are explainable on the basis of legitimate

differences in starting salaries and other factors which differentiate salaries in the academic community -- that is, years since highest degree and years in rank. (See the decision of the court with regard to Dr. Joanne Amspoker.)

DR. ESPESETH

Dr. Knute Espeseth received a B.S. degree in business education/history from Minot State Teachers College, North Dakota, in 1955; an M.S. degree in education from the University of North Dakota in 1961; and a Ph.D. degree in special education/educational psychology from the University of Wisconsin in 1965. He joined the faculty at the UofO College of Education in 1965 (two years after Dr. Waugh). His initial appointment was at the rank of assistant professor. (Dr. Waugh was an instructor

at this time.) Dr. Espeseth became an associate professor in 1969, (two years before Dr. Waugh received her Ph.D. degree and while Dr. Waugh was at the rank of senior instructor and five years before Dr. Waugh became an associate professor). Like Dr. Waugh, Dr. Espeseth has never become a full professor.

— As to Dr. Espeseth's credentials, Dr. Waugh testified as follows:

> Q [By Mr. Willner] All right, before coming to the University of Oregon, what prior experience did Dr. Espeseth have in teaching, and what prior experience did you have in teaching?
>
> A He had taught crippled-mother, health impaired teachers of children for five years and was a psychologist for one year, total of six years of relevant experience; I had had 9.
>
> Q Did you compare your record of scholarship and research with Dr. Espeseth?

A Well, obviously, mine is superior completely. Doctor -- to be exact on this vita he lists -- it was five items. Three of them are in refereed journals, two of them are other publications.

. . .

Q How do you compare the teaching qualities or teaching experience of Dr. Espeseth with yourself?

A The document that I have, that does that, that is available to me, is a document that was prepared by a doctoral student who followed up some of our students. In the College of Education we have a continuing effort to assess the quality of our training, and so, a student by the name of Helen Begen interviewed 30 people who had completed their Masters Degrees, then they were teaching within the geographic area of Eugene, and she asked them to list the courses that they felt were most useful to them, and also the ones that were least useful.

The two that were identified as most useful were the ones that I teach, 15 students identified Diagnosis Basic Skills, which, of course, I taught in conjunction with my work in

DeBusk Center; and seven identified practicum that that was the most useful, and of the courses that were identified as least useful, one of them was taught solely by Dr. Espeseth, historical legal bases, then another one was shared with Dr. Sheperd, another comparator, another member of the faculty.

. . .

Q Compare your service to the institution with Dr. Espeseth's service to the institution.

A Mine is superior.

Q And what do you base that statement on?

A On the numbers of committees that I served on.

q And what is the highest level committee you served on in the university?

A Highest level?

Q Yes, most significant committee?

A I would expect the faculty personnel committee, the one we talked about earlier is one.

Q And that is elected by whom?

A All the faculty members in the University of Oregon.

Q How many people serve on the faculty personnel committee?

A Eight, I believe.

Q And Dr. Espeseth, ever served on that committee or any comparable committee at the University?

A He hasn't served on that committee.

(Tr. 2,049-052).

The Board concedes that overall, and particularly in recent years, Dr. Waugh's scholarship is better than Dr. Espeseth's. Dr. Waugh has more articles published in refereed journals than Dr. Espeseth. However, Dr. Espeseth's scholarship was strong enough in his earlier years to permit his promotion from the rank of assistant professor to the rank of associate professor.

Dr. Espeseth has coordinated several programs for the mentally retarded and

has served as chair of the special education area from 1974 through 1977. Dean Gilberts testified regarding Dr. Waugh's and Dr. Espeseth's careers:

> Dr. Espeseth received his Ph.D. from the University of Wisconsin in '65, was promoted to associate professor in '69 and, again, that was several years before Ruth [Dr. Waugh] was appointed assistant professor.
>
> . . .
>
> He had also had a similar experiential background prior to getting his doctorate and coming into higher education. And his early years, as I indicated, his productivity in terms of scholarship was reasonably strong. Knute [Dr. Espeseth] has been a very effective member of the faculty over the years, serving in the position of the head of the Special Ed. Department for a period of time, currently working on off-site training programs in Southern Oregon.
>
> I think that probably Knute is a closer comparison on balance than Dr. Sheperd. However, there are factors, again, of coming to the

> University of Oregon in 1968 and having the advantage -- as an assistant professor, having the advantage of those extra years in the university as a professor.

(Tr. 11,942-943).

The most significant differences between Dr. Waugh and Dr. Espeseth are that Dr. Espeseth received his Ph.D. degree six years before Dr. Waugh; he obtained the rank of assistant professor six years before Dr. Waugh; and he obtained the rank of associate professor six years before Dr. Waugh. The dates faculty members receive Ph.D. degrees and move ahead in rank are important to their salaries. Promotions ordinarily trigger salary increases. Salary at hire is determined in part on rank placement.

Dr. Espeseth's starting salary was $9000 in the 1964-65 academic year.

That same year, Dr. Waugh received $7200. The court knows nothing about the circumstances of Dr. Espeseth's beginning salary. Whatever those circumstances were, the fact that he had just received a Ph.D. degree justifies a salary greater than Dr. Waugh's. Since 1977, Dr. Waugh's salary increases have exceeded those of all three of her comparators. This is probably indicative of the fact that her productivity increased during those years. Her rank as instructor and senior instructor in her earlier years undoubtedly affected her salary. The evidence presented by the Board suggests that because Dr. Waugh was employed full time while obtaining her Ph.D. degree, her low productivity during the earlier years also affected her salary. On the other hand, Dr. Espeseth had his Ph.D. degree

at or shortly after he came to the UofO.

Assuming, without deciding, that Dr. Espeseth is an equally qualified man who performs substantially the same job as Dr. Waugh, the salary differences between Dr. Waugh and Dr. Espeseth are explainable on the basis of factors which legitimately differentiate salaries in the academic community -- that is, years since highest degree and years in rank. (See the decision of the court with regard to Dr. Joanne Amspoker.)

MISCELLANEOUS CLAIMS

Dr. Waugh claims that she was discriminated against on the basis of her sex in that she was assigned to practical supervision courses (also referred to as practicum assignments) which are more burdensome and have less status than regular teaching positions and which take so much time that the

writing and research necessary for professional advancement cannot be done.

Dr. Waugh testified as follows:

> Q [By Mr. Willner] Dr. Waugh, in the College of Education at the University of Oregon during the 20 years that you were in that college, was there any difference in the assignment of faculty women and faculty men?
>
> A The major difference has been assigning a faculty woman to practical supervision. Practical supervision is time consuming, low status and that was one of my responsibilities through the first eleven years of my tenure at the University and then females followed me.

(Tr. 2062).

> Q Dr. Waugh, what difference does it make in a professional career to be assigned to practicum assignments?
>
> A Limits the amount of time for research and writing.
>
> Q And why is that of importance?
>
> A Practicum assignment means that you are there observing the individual as a teacher or counselor or whatever. It

> often means traveling to schools where the supervision occurs. So the amount of time required for six practicum students is often as much as the time required for teaching a course with sixty students.

(Tr. 2,065-065)

Dean Gilberts testified that these practicum assignments are the most important part of a teacher training program. He explained that he would like to see the teacher training program expanded to a fifth year in order to provide another year of field-based training experiences. Dean Gilberts testified that the College of Education seeks faculty who have had successful classroom experiences to be practicum supervisors and that there are more women with such experiences than men. Given the fact that Dr. Waugh's primary experience before she started working at the UofO was as an elementary school

teacher, it is logical that she would be a candidate for practicum supervision. Furthermore, Dr. Waugh has not been involved in practicum assignments since 1974.

Dr. Waugh also testified that women have not received an appropriate proportion of administrative positions in the College of Education. She acknowledges that she has never sought any administrative position other than the one she now holds as acting chair of the area of special education, and that she knows of no other women recommended for administrative positions who did not receive them. In fact, Dr. Dianne Rinehart was the Assistant Dean in the College of Education beginning in 1978 and is now the Dean of the College of Education at the University of West Virginia. Dean Rinehart was replaced by

Dr. Diane Dunlap, who testified that she has received support for her aspirations to higher administrative positions. Finally, Dr. Edna Dehaven and Dr. Faye Haisley have held administrative appointments in the College of Education.

Dr. Waugh next complains that Dean Gilberts once told her in 1974 that "women don't want responsibility." Although Dr. Waugh considered this to be an "off the cuff" comment, Dean Gilberts testified that this statement was made in the context of asking Dr. Waugh if she would be interested in becoming head or coordinator of the Special Education Program.

Dr. Gilbert testified:

> I had asked Ruth [Waugh] to chair that committee which was composed of a number of faculty members and to make recommendations to me about

> where it should be placed. And in the course of talking about the committee's deliberations, Ruth and I were visiting in my office. I said, well, one of our problems is going to be who is going to provide the leadership for that unit. Who will be the head or coordinator of that particular program. And I asked Ruth if she would be interested in that kind of position. And she indicated she would not. And I indicated that it had been one of my real disappointments in my career when competent, able women were asked to consider the possibility of a position such as that, that I had been turned down much more often than I liked.

(Tr. 11,962).

Lastly, Dr. Waugh complains that junior women faculty have fewer mentor relationships with senior faculty than junior male faculty do. However, she admits that she worked with Associate Dean Robert Schwarz in a mentor relationship during her administrative internship.

Dr. Waugh cannot prevail on her miscellaneous claims.

OREGON STATE UNIVERSITY

CORVALLIS, OREGON

Dianna Kale

Dr. Margaret Lumpkin

DIANNA KALE

Dianna Kale, a visiting assistant professor in the Women's Studies program at Oregon State University (OSU), claims that she was discriminated against on the basis of her sex while serving as program director of art education in the School of Education at OSU in that: (1) she received a lower salary than male colleagues in the same position with substantially equal experience and qualifications; (2) she was not promoted to a tenure track position while men with substantially equal experience and qualifications were so promoted; (3) she was forced to carry a heavier workload than male faculty with substantially equal positions; (4) she was not hired on a tenure track position in 1981 even though she was fully qualified to perform the job; (5) she was not offered

the rank of assistant professor in 1981, even though she had been recommended by the search committee twice for the position, and instead was hired to perform the same duties as advertised in the position description, but at a lower rank and salary; (6) she was not given adequate economic and other support necessary for her to complete her Ph.D. degree, and then OSU used the delay in obtaining her Ph.D. degree as an excuse not to hire her for a tenure track, assistant professor position; and (7) the budget cuts which resulted in her position being eliminated disproportionately affected women and minorities who held fixed term contracts. Ms. Kale is an intervening plaintiff and did not file a complaint with the Equal Employment Opportunity Commission.

Ms. Kale received a bachelor of art education degree from Wichita State University in 1972 and a master of science degree in art education from the University of Oregon in 1977. She received her master's degree while working toward her doctoral degree in art education at the University of Oregon. Prior to being hired at OSU in 1977, she held the positions of graduate teaching fellow, Department of Art Education, University of Oregon, 1976-77; research assistant, Institute for Community Arts, University of Oregon, 1974-76; art education instructor, Lane Community College, winter quarters 1974-76; art instructor, Nebraska Public Schools, 1972-73; and art instructor, Project Teach, a federally funded program designed for teachers of core area

ghetto children, Wichita, Kansas, 1971-72.

Ms. Kale is an artist whose field of expertise is drawing. She has shown her work at several exhibits and made presentations in 1976 and 1978 to the National Art Education Association. She has been active in professional community affairs and professional affiliations. She has also received honors for her art work.

At the time that Ms. Kale applied for a position at OSU, she had not completed her coursework for her Ph.D. degree. Ordinarily a doctoral degree student completes the coursework, takes comprehensive examinations, and then is advanced to a status called "candidacy" and obtains approval for a dissertation study. On Ms. Kale's employment

application she calls herself a "candidate" for a doctoral degree.

Ms. Kale received her first teaching appointment at OSU in 1977 and thereafter taught elementary and secondary art education courses mostly on a part-time basis in the OSU School of Education until 1982, when her position was eliminated as a part of a program reduction required by a financial crisis. The amount of time Ms. Kale taught during those years varied from term to term, but she was never employed less than half-time. She was always on a fixed-term contract.

Ms. Kale was hired to perform the duties of art education "program director" for the OSU School of Education. She replaced Phyllis Richardson, who left her part-time position in the College of Education for

a full-time position in the Department of Art in the College of Liberal Arts. The major mission of the OSU School of Education is teacher training. For each area in which the School of Education trains students to be teachers (e.g., speech, English, foreign languages, vocational education), a faculty member called "program director" has the responsibility for making certain that the students graduating in that particular teaching area meet the State of Oregon's requirements for teacher certification. Program directors have the responsibility for advising students, preparing reports for the teaching practices committee, teaching a methods course, and supervising student teachers. These "program directors" perform no "administrative" duties in the sense of making decisions for other

faculty members regarding promotions, tenure, or salary increments. Ms. Kale's duties, then, were to make sure that Ms. Kale students graduating in art education would meet the State of Oregon's requirements for certification as art teachers. Hers was a one-person program. In that capacity, she advised students who sought state certification in art education, supervised student teachers, and supervised the junior level theory and practicum students. She also performed various other duties assigned by the Dean of the School of Education. For example, Ms. Kale received an increase in salary one semester to paint a mural in the faculty room.

SALARY DISCRIMINATION CLAIM

Ms. Kale claims that because of her sex she received a lower salary than equally qualified male colleagues in the

School of Education who performed substantially the same job as she performed. In support of her claim, Ms. Kale compared her salary to the salaries of male faculty in the School of Education. Exhibit 576, which follows this page, shows this salary comparison.

Ms. Kale testified that she chose individuals listed in Exhibit 576 as her comparators "because they were identified as faculty members in the School of Education who had Master's degrees or less, who had approximately the same amount of experience -- years of experience or service to the university, and also were on fixed-term appointment." (Tr. 7,883). The figures as presented show that Ms. Kale received a lower salary than her male comparators. Therefore, the court must determine whether these are appropriate

	1973-74	1974-75	1975-76	1976-77
DIANNA KALE				
WALTER LORENCE				$16,293.75
JUAN GUZMAN	$10,377.00	$11,138.00	$12,642.00	$14,100.75
LAWRENCE MOELLER	$13,500.00	$14,110.00	$15,588.00	$16,524.00
RICHARD SWANSON				
JAMES SCHLEGAL				
RALPH YOSHIHURA				
BAYARD HILLWAY				
DARRELL LANGEVIN				
JOHN HAVRELIK				
JAMES COLMAN				

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	1977-78	1978-79	1979-80	1980-81	1981-82
DIANNA KALE					
WALTER LORENCE	$12,000.00	$12,483.00	$13,482.00	$14,292.00	$15,597.00
JUAN GUZMAN	$17,275.00	$17,963.00	$18,684.00	$20,088.00	$21,834.00
LAWRENCE MOELLER	$15,513.75	$16,128.00			
RICHARD SWANSON	$16,974.00				
JAMES SCHLEGAL			~~$21,168.00~~ 18,997.26	$21,168.00	
RALPH YOSHIMURA			$18,000.00	$19,800.00	$19,872.00
BAYARD HILLWAY				$16,500.00	$18,018.00
DARRELL LANGEVIN				$16,065.00	$17,874.00
JOHN HAVRELIK				$16,065.00	$17,541.00
JAMES COLMAN				$16,267.50	$16,775.75
				$14,967.00	$17,217.00

PLAINTIFF'S EXHIBIT 576-R

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comparators, and if they are appropriate comparators, whether other legitimate, nondiscriminatory reasons account for the salary differences. Dr. Sylvia Tucker, former Dean of the OSU School of Education, and Dr. Charles Stamps, former Assistant Dean of the OSU School of Education, both testified that Mr. Lorence, Mr. Guzman, Mr. Swanson, Mr. Yoshimura, Mr. Hillway, Mr. Havrelik, and Mr. Coleman are not appropriate salary comparators for Ms. Kale because they were all on grants and not funded from School of Education funds as were Ms. Kale, Mr. Moeller, and Mr. Schlegal. DMr. Stamps explained:

> A. Grants are short lived. Often one, two or three years maximum with the understanding that you are no longer employed once that grant expires. You -- when the person writes the proposal for the grant, he or she also requests a salary. It is not uncommon for the salary

> of that individual to be unlike School of Education faculty to be hired. And the purpose of that is because they are a high risk group. They are not subject to being renewed as a fixed term person or a tenure track person is. And that's the justification of paying them a higher salary.

(Tr. 17,162).

In addition to these faculty having their salaries funded from a different source than Ms. Kale's, all of the male faculty members listed on exhibit 576 are in industrial or vocational education. For example, Mr. Moeller[1] was in the area of electronics. Dr. Stamps, referring to industrial and vocational education, explained:

> A It is a high market. It is a high market discipline in which you are constantly competing with business and industry siphoning them off. And we often had to pay more. An example is just before I left we hired a man at full professorship at the top salary

because of the market in industrial education.

(Tr. - 17,163).

Ms. Kale does not dispute that all of her comparators are in the industrial or vocational education area, that the industrial and vocational fields are "high market," or that all but Mr. Moeller and Mr. Schlegal are funded by grants. Ms. Kale argues, however, that the Board's explanation is simply a pretext for sex discrimination because fixed-term contract positions, like grant-funded positions, "involve no guarantees of continued employment."

While fixed-term appointments may be subject to many contingencies, especially in times of budget crises, this court can not overlook the differences between Ms. Kale and her comparators in the areas of sources of funding and

educational specialties. Grants are often written by faculty members in order to fund their own positions, and their salaries are often negotiated with the granting authority as well as OSU. The particular granting authority may have a salary range or salary flexibility that the OSU School of Education does not have. (Tr. 17,878). Faculty on grants may be subject to joint administration and may be required by the granting authority to perform various jobs as well as teach. As Dr. Tucker summarized:

> In some cases the persons in those jobs have written grants and negotiated salaries, but it's never just the function of the university in the traditional salary structure on the grants, unless it's an in-university, in-house grant.

(Tr. 17,878). Ms. Kale apparently contends that since she came to OSU when her comparators did,[2] and since she had

approximately the same amount of experience they had, and since she had the same degree they had, she must be paid the same as they are paid, without reference to disciplines or funding sources. This position ignores reality. Certain disciplines are in demand. Demand translates into money. The Board's explanation for the salary differences between Ms. Kale and her comparators is credible and logical. Although Ms. Kale's salary is lower than those to which she compares herself, the court finds that the reasons for those differences are legitimate and not a pretext for sex discrimination.

PROMOTION

Ms. Kale asserts that she was discriminated against because of her sex in that she was not promoted to a tenure track position, while men with

comparable experience and qualifications were so promoted. Ms. Kale asks the court to find that "between 20 and 30 males who began teaching on fixed term contracts at approximately the same time as Ms. Kale are now assistant professors." (Plaintiff's Proposed Finding of Fact #24).

Ms. Kale testified as follows:

> Q [By Mr. Willner] [D]id you make a count of the number of male assistant professors without Ph.D.'s at OSU?
>
> A I started a count in the summer -- this summer, and discovered that there were somewhere around 20 to 30 male Ph.D.'s (sic) who were instructors who came about the same time I did on -- instructors -- excuse me, they were assistant professors who came about the same time I did on fixed term contracts.

(Tr. 7,895).

This is the only evidence Ms. Kale submitted in support of this claim. It

is totally insufficient to support any claim. It may be that this evidence was offered in support of Ms. Kale's claim that she was not hired to the advertised assistant professor position in 1981. To the extent that this evidence is not related to the advertised assistant professor position claim, the court declines to consider it further.

WORKLOAD

Ms. Kale asks the court to find that her class load was much heavier than the male faculty members of the School of Education as measured by the School of Education's own formula for determining FTE allocations for supervisory field experiences and faculty loads, and to further find that the male faculty members of the school of education had research time available and she did

not.[3] (Ms. Kale's Proposed Findings of Fact #22 and #23).

To support her claim, Ms. Kale relies on Exhibit 594. The first page of exhibit 594 is entitled "Formulas for Determining FTE Allocations for Supervisory Field Experiences and Faculty Loads." The subsequent pages of exhibit 594, which were prepared by Ms. Kale, attempt to compare Ms. Kale with male faculty by means of computing and comparing the amount of FTE they generated with the amount of FTE they were assigned. The first problem with exhibit 594 is that it is not complete or accurate. Referring to the figures she relies on to compare herself with the male faculty, Ms. Kale notes on the exhibit:

"This information may not be complete or accurate as it was drawn from assignment sheets in Dr. Stamps' office.

This concern stems from knowledge of inaccuracy in my assignment sheets from the same source.

This exhibit, which on its face concedes that it may not be accurate, has little probative value.

Furthermore, Dr. Stamps explained that the first page of exhibit 594 on "Formulas" was a guide for translating into FTE the duties of faculty who were supervising student teachers. (Tr. 17,145). Dr. Stamps testified that "generated" FTE (determined by student credit hours) was not comparable to "assigned" FTE (determined by the faculty workload including the number of hours taught). He stated that "generated" FTE was used mainly in budget allocations. (Tr. 17,146).

Both Dr. Tucker and Dr. Stamps testified that Ms. Kale's workload was never increased without a corresponding

increase in FTE and salary. (Tr. 17,148, 17,858). Dr. Tucker and Dr. Stamps both testified that Ms. Kale took on work that she was not assigned, and Dr. Tucker testified that because Ms. Kale was often slow in completing some of the work that she was assigned, she "may well have felt that she was overloaded because she had things from the first year to complete." (Tr. 17,862).

Ms. Kale's only evidence in support of this claim, besides her own testimony that she was only given half the FTE that male faculty were given, is exhibit 594, which, by her own admission, "may not be complete or accurate." The Board's witnesses testified that even if Ms. Kale's figures were reliable, the exhibit attempts to compare FTE figures which cannot be compared. Ms. Kale

offered no evidence to rebut the Board's explanation. The court finds that Ms. Kale has failed to prove that she was given a heavier workload than her male colleagues.

SUPPORT FOR DOCTORAL WORK

Ms. Kale claims that she was discriminated against because of her sex in that she was not given adequate economic and other support to allow her to complete her Ph.D. and that thereafter OSU administrators used her delay in obtaining the Ph.D. degree as an excuse not to hire her for a tenure track, assistant professor position in 1981. (Ms. Kale's Proposed Findings of Fact #30).

Ms. Kale testified that Dr. Tucker "volunteered to support my going back to school at the University of Oregon" (Tr. 7,856) during the summer of 1980 and

stated that "the school of education would pay for [her] tuition." (Tr. 7,856). Ms. Kale did go back to school that summer, but complains to this court that, "they did not provide the help that had been promised." (Tr. 7856). In addition, Ms. Kale asks the court to find that she was not supported by OSU in her efforts to obtain her doctorate because she was advised in 1980 that she could not attend a seminar on "ethnic heritage federal grants" on university funds since it was believed that it would help her in her dissertation. (Ms. Kale's Proposed Findings of Fact #8. See also Tr. 7,854).

Ms. Kale does not offer any evidence, direct or indirect, that the OSU School of Education financially supported any other faculty member, male or female, in pursuit of his or her

terminal degree. Whether or not Dr. Tucker made a promise to Ms. Kale and thereafter breached that promise, there is no evidence in this record that Dr. Tucker's alleged actions were based upon a sex bias. However, it is clear from the record that both Dr. Tucker and Dr. Stamps were eager for Ms. Kale to complete her Ph.D. degree and adjusted Ms. Kale's workload to accommodate her pursuit of that degree. (Tr. 17,932). The court finds that Ms. Kale has not carried her burden of proving that she was discriminated against because of her sex in failing to receive economic and other support from the OSU School of Education in order to complete her doctoral degree.

1981 JOB SEARCH

In 1981, the OSU School of Education advertised as open a position in art

education for the 1981-82 school year. The recipient of the position was to teach elementary and secondary art methods and to coordinate the secondary art education program. The position was denominated tenure track, at the level of assistant professor. A doctoral degree was required. Other requirements were teaching experience, evidence of research in education, and a record of service to the academic/educational community. The responsibilities of the position were to be teaching and advising at the undergraduate and graduate levels, school and university committees, research, field supervision, and off-campus teaching. Ms. Kale applied for the position despite the fact that she did not have a doctoral degree, and she was not hired. Ms. Kale now claims that OSU's requirement of a

doctoral degree was a pretext for sex discrimination.

The notification of academic position opening (Pl. Ex.530), filed by the OSU School of Education with the affirmative action office, is dated December 15, 1980. In the spring of 1981, OSU offered the position to a female applicant with a doctoral degree, but she did not accept the offer. (Tr. 7,860). The search committee then recommended to the dean that since Ms. Kale was available, she be hired. Dean Tucker, however, asked for a further search. Several months later, another applicant with a doctoral degree was considered, but this person was unacceptable and was not offered the position. The search committee again recommended to the dean that since Ms. Kale was available, she be hired.

Ms. Kale was then offered a position for the 1981-82 school year on a fixed-term contract at the instructor level with a base salary of $15,597. The salary range for the position advertised was $16,000 to $17,000. Ms. Kale argues that she was qualified for the position as advertised and should have been appointed to that position and that the reason she did not receive the appointment was sex discrimination. Ms. Kale testified:

> Q [By Mr. Willner] All right. Did you have a discussion with Dean Tucker about the salary for the position?
>
> A Yes, I did.
>
> Q At that point you had been doing the position for how long?
>
> A I had just completed my fourth year.
>
> Q All right. And did you ask Dean Tucker for a higher salary?

A Yes, I did.

Q And what was her response to that request for a higher salary?

A No.

Q Did you have a further discussion, a further discussion with Dean Tucker about her views on your attitude?

A Yes, I did.

Q Approximately when was this?

A The next day.

Q And what month are we up to, approximately?

A September of 1981.

Q All right, and what did Dean Tucker say about your attitude and what she was considering -- and what she had considered doing?

A In the discussion about salary and meeting the position announcement, I requested that I felt like I qualified for the position as it was announced and asked her for -- asked her for the increase in salary, for annual track and for assistant professor level. And she said those were not negotiable.

Q By annual track, do you mean tenure track?

A Yes, annual tenure track. And we had a -- some words over that. The next day I went in and accepted her position as she had offered it for an instructor, fixed term at the lower salary.

Q What did she say?

A I said I was sorry to have argued with her, and she said she was sorry, too, that I had argued with her, too. And she said that I had -- she had been considering not hiring me because of my negative energy.

Q Because of your negative energy. Did you ask her what she meant or

A We had some discussion about that.

Q What did she next say?

A She said that she wanted to help me overcome this negative energy. Okay. And then we sat down and had some discussion about it. And she said that she had -- she implied that she had thought it over, and she thought perhaps the reason why I had such negative energy was because I

was a woman and a minority [Ms. Kale is a native American], and it didn't work that way with her.

Q Did she make any further comments about the level of your salary?

A Yes, she did. She told me that she had taken me from low poverty to high poverty.

Q All right. Was any action taken in connection with your position a few weeks later?

A Yes, I was hired for that year. And in September at the faculty meeting that Dean Tucker announced the budget cuts which she had been working on during those days which I negotiated -- attempted to negotiate salary -- at a faculty meeting she announced that

. . .

Q All right, what announcement was made shortly thereafter?

A Dean Tucker announced in faculty meeting that due to budget cuts, she would recommend the suspension of a secondary art education [program director] and that would involve approximately one-half of my salary.

(Tr. 7865-69).

Dr. Tucker and Dr. Stamps testified that although Ms. Kale was hired on a fixed-term contract to cover the courses that the advertised position would have covered, she was not expected to and could not fulfill the position as advertised, because she did not have a doctoral degree and therefore could not participate in advising graduate students as the position contemplated. Dr. Tucker explained that the doctorate was very important to OSU:

> A [Dr. Tucker] No, we advertised for an art educator every year, I guess, after Phyllis [Richardson, Ms. Kale's predecessor] left, trying to find someone with a doctorate. But during that period of time there was a rather long, long search process. We were -- we were looking for someone with a -- with a doctoral degree to be our art educator, hopefully someone who would be available to the department of art and the college of liberal arts

should they choose to employ that person, but someone who could do both elementary and secondary, who was a studio artist as well, had the respect of the art community as well as the education community. And it was during a long process during the termination of a long -- after the termination of a long process where we found a couple of people with doctoral degrees. As I recall, we offered the job to one person who declined. And I don't recall whether the job was offered to a second person. But then finally the department -- it again was getting late in the summer, and I don't recall the date -- said Diana [Ms. Kale] is available, and we think we must get on with it, and we would recommend that you hire Diana. And

Q [By Mr. Casby] Did that mean . . .

A And the position was . . .

Q Just to understand what you just said, did that mean hire her for the . . .

A For the year.

Q permanent position that was being advertised or what?

A No. No. I was about to explain that the position announcement said assistant professor with a salary range and with a doctorate required. So -- and I don't recall what else was in, but I know that those things were in. And as I said, we could not find someone, it was getting late and the department said we have to meet the classes, Diana's available and we suggest that you employ her for the year. But it was not possible to employ her under the circumstances in the job description because she did not meet those requirements.

Q In what respect?

A She did not have a doctorate. That -- that was the primary one. So this discussion took place surrounding that. Diana came into my office and . . . demanded that she be given an assistant professorship, that she be paid the salary on the job announcement and that she be placed on tenure track. And I said Diana, I cannot do any one of the three because you do not meet the requirements as they were listed on the job description and okayed by affirmative action. And then proceeded to offer her the job for the year. And I cannot

tell you the differential in salary.

But I said I cannot place you on tenure track and I cannot offer you the assistant professorship. And the discussion was -- was around those three areas.

And Diana, as I recall, was not very happy with that and said that -- she again said this is what's on the job description and this is -- this is what I'm -- what I want. I want to be placed on tenure track, I want salary that's advertised and I want to be an assistant professor. And to the best of my recollection, Diana then said I will have to think about it. And that's -- that's about what I remember about that.

There were some other discussions about how she conducted her classroom and so forth, but the main conversation and perhaps the unpleasant part of the conversation surrounded Diana's demands that she be given those three things as advertised in the job description.

(Tr. 17,867-870) (Emphasis added).

Dr. Stamps offered this explanation of the requirements for the position that was advertised.

> Q [By Mr. Casby] And what does it ask for in the way of educational qualifications?
>
> A A doctorate.
>
> Q And when did that come about, that decision? A Art education was one of those programs that was to 17- Ms. Kale be cut because of financial difficulties in the state. And we therefore were looking for an individual who could be more versatile than just teaching the elementary art program because the enrollment in elementary art education was being retained but not the secondary, not the people majoring to be a teacher in art education. I hope I'm saying that clearly enough. The students who were going to be elementary majors would take a course in art education but they were not in a program to be an art educator, a 406-N I'm referring to. Education 406-N. We had a great shortage of faculty members who were approved and functioned as graduate faculty. Diana did not have graduate faculty status nor did the previous

> person to her have graduate faculty status to advise in the school of education. And we felt that we needed someone who could go across the board and do advising and work with doctoral candidates and finishing the dissertation in a broad base like in foundations.
>
> . . . [W]e felt that if we were ever going to build a graduate program in art, we needed someone with a doctorate. We had no argument to do that if we did not have someone with a doctorate. And on the basis of that we asked for someone with a doctorate. (Tr. 17,164-165).

In rebuttal to the Board's explanation of why she was not hired for the advertised position, Ms. Kale asserts that the requirement of a doctorate "was established specifically to prevent [her] from attaining the position and that it was not a necessary requirement." (Tr. 7928). Ms. Kale points to several facts to support her claim that the reasons

given by the Board are simply a pretext for sex discrimination.

First, she claims that because the Board's witness, Dr. Robert Barr, current Dean of the merged OSU-Western Oregon State College School of Education, testified at trial that he would have "preferred" to have someone with a doctorate and the position description stated "doctorate required," the decision to require (as opposed to prefer) a doctorate was made to specifically prevent Ms. Kale from retaining the position which she had held for four years. (Plaintiff's Proposed Rebuttal Findings of Fact #3).

The position description and the decision to require a doctorate for the position were initiated prior to December 15, 1980. Dr. Barr did not join the OSU faculty until January, 1982, and was

not involved either directly or indirectly in the preparation of the notice or in the decision not to hire Ms. Kale in 1981. In his testimony Dr. Barr was asked to comment on Ms. Kale's 1982 termination as a result of budget reductions. He stated generally that, "the demand of the land grant university would be that any faculty member would be preferred to have a doctorate. And under -- only under unusual situations would we consider anything other than that." (Tr. 17,270-271).

Dr. Barr's general comments have no probative value whatsoever, since he was not in any way involved with the decision to require a doctorate. His comments show only that he felt that to hire someone without a doctorate would be a rare exception. Both Dr. Stamps and Dr. Tucker, who made the actual decision to

require a doctorate, testified at length as to the importance of a doctorate to the OSU School of Education. The court finds their testimony credible.

Second, Ms. Kale claims that Dr. Tucker made the statement, "Dianna, I'm considering not hiring you at all because of all of your negative energy," and, "The reason I believe you have such negative energy is because you are a woman and a minority," and that Dr. Tucker did not deny the statements. Ms. Kale claims these statements are evidence of sex discrimination. Dr. Tucker explained these alleged statements as follows:

> Q [By Mr. Willner] Yes. Did you say words to the effect "Dianna, I believe the reason you have such negative energy is because you are a woman and a minority, and you have had to operate that way in the past?"

A Dianna and I talked at various times about being female and Dianna, certainly, about being minority. And if a statement close to those words -- it would not have been said out of context. It would have been said -- it would have been said with an understanding that I, too, have operated out of the category of a woman and certainly often the only woman in a situation.

The dean of education at Oregon State was a good example. I operated most of my life in a situation where I was operating out of female status, so I understand a little bit what that's about. And if I said those words, it would have been in light of saying, look, it's very difficult to be positive when you are operating out of a situation which sometimes makes you feel negative. And I do not -- I would never have said those words separate from -- from other statements which would have meant that, yes, I understand and I care.

Q Do you remember whether or not you said words to that effect?

A I'm sure at some time I would have said -- I don't know whether I said those words or

> under what circumstance. I am certain that I would never have said those words standing alone as you have said them.
>
> (Tr. 17,907-908) (Emphasis added).

Dr. Tucker did not deny that a conversation regarding negative energy and Ms. Kale's sex and racial status took place. A trier of fact can infer several things from Dr. Tucker's explanation of her comments. Dr. Tucker could be said to have recognized that sex discrimination was operating against Ms. Kale whether or not Dr. Tucker herself was acting in a discriminatory manner. On the other hand, Dr. Tucker could be said to have recognized the historical difficulties women often face in the workplace and to have wished to assure Ms. Kale that she would be treated equally. The true meaning of Dr. Tucker's testimony may lie somewhere in

the middle. With this in mind, the court will take into consideration the uncertainty of Dr. Tucker's comments in determining whether Dr. Tucker required a doctorate in the advertised position as a pretext for sex discrimination against Ms. Kale. Third, Ms. Kale asks the court to find that male faculty with masters degrees hold tenure track positions at the rank of assistant professor at OSU in support of her claim that requiring a doctorate of her was pretext for sex discrimination. Ms. Kale offers no specific examples in her testimony or exhibits to sup port this finding. Ms. Kale testified on cross-examination that she began to compile a list of assistant professors without Ph.D.'s but did not complete it and did not know where the partial list was. More importantly, she testified that to her

knowledge no one had been hired at the assistant professor rank in the School of Education without a doctorate since 1977. (Tr. 7,898). The court does not have sufficient facts before it to make a finding in this regard.

Fourth, Ms. Kale asserts that she was in fact hired for the position as advertised. Ms. Kale contends that her faculty assignment (job duties) on fixed term contract for the 1981-82 academic year was identical to the one advertised, proving that she was qualified for the position. The Board, through the testimony of Dr. Stamps and Dr. Tucker, claims that Ms. Kale could not fulfill graduate committee functions intended to be a part of the advertised position and in fact did not fulfill the duties of the advertised position. Ms. Kale contends that serving on graduate committees is

voluntary and not required as a part of a faculty member's assigned load and that art education was only a bachelors degree program anyway.

Both Dr. Tucker and Dr. Stamps confirmed that the art education program in the OSU School of Education offered no graduate level degrees but they explained that other disciplines in the School of Education offered both masters and doctoral degrees. Dr. Tucker explained the importance of having an art educator with a doctoral degree:

> A [Dr. Tucker] . . . the doctorate in art education for the person that we were hiring was very important because we had dissertations in the area of such -- such things as learning where a person might want to do something -- might want to do research on learning with a visual component of learning. How do students use the visual -- visual arts in learning. And it would be very important to have someone schooled in the visual arts.

> And an art education person I would presume, and one would have to presume that that's the case, that this is true. There might be a degree in our foundations area in Ed Psych where this would be the case. There might be a degree in vocational education where someone might be interested in what the visual arts would contribute to such a degree and it might be very important for a person on the committee to have that background.
>
> And whether or not, as I testified this morning, there was a degree in art education from my perspective was immaterial. We needed that skill. It was very important to the school.
>
> (Tr. 17,925-926).

The OSU School of Education offers the following higher degrees: Master of Arts, Master of Education, Master of Science, Doctor of Education, and Doctor of Philosophy. In order to direct the research of graduate students properly, the School of Education must have faculty with Ph.D. degrees. Faculty

members without Ph.D. degrees cannot participate fully on graduate student committees. Without a doctoral degree, Ms. Kale was ineligible to serve fully on graduate committees. She was deemed to be only an associate graduate faculty member.

While Ms. Kale claims that she was competent to perform the necessary graduate advising, the record contains a credible explanation of why she was not qualified to do so. The academic world is not alone in declining to equate "competence" and "qualification." The court finds that the School of Education was acting reasonably in attempting to hire someone with a doctoral degree in 1981, and was not using this qualification as a pretext for sex discrimination.

Fifth, Ms. Kale asserts that the courses she taught while at OSU have been and continue to be taught by faculty members without doctoral degrees. As examples, she names Scott Meyer, a male with a bachelors degree, who was hired to teach one of her courses in the summer of 1981; Phyllis Richardson, her predecessor, who did not have a doctorate; and James Kirk, a faculty member at Western Oregon State College (WOSC) who does not have a doctorate and who taught her courses after her position was eliminated.

In the summer of 1981, the School of Education appointed Scott Meyer, who had a Bachelor of Science degree in elementary education from OSU, to teach the course in elementary art education that Ms. Kale had developed and had previously taught. When Ms. Kale heard

of the proposed hiring of Scott Meyer, she went to the OSU Affirmative Action Officer, Pearl Spears Gray, intending to file a formal complaint. Although a formal complaint was not filed, Ms. Kale testified that Ms.Gray later informed her that Dr. Tucker and Dr. Lee Jenkins, the division coordinator for elementary education, both called Ms.Gray and "apologized for not following the affirmative action procedures that summer. " (Tr. 7863). Mr. Meyer's appointment for that course was can celled, and he was given another course to teach that summer. Ms. Kale was then offered the position for the summer of 1981. Ms. Kale was paid $1,503 and Meyer was paid $1,200. Apparently Scott Meyer only taught that one course that one summer at OSU.

Ms. Richardson, who was Ms. Kale's predecessor, held a joint appointment with the College of Liberal Arts and taught half-time as an art education teacher in the OSU School of Education. Mr. Kirk, by virtue of seniority and tenure was called upon to teach the art courses in the merged OSU-Western Oregon State College School of Education after the dust had settled on a major financial crisis. The School of Education was directed to make a major budget reduction totaling 7.5 percent of its budget. Because the Oregon State Legislature was concerned about program duplication, the OSU School of Education was also directed to review programs with an emphasis on a possible elimination of those that were available at other campuses. Dr. Tucker originally made preliminary recommendations for the budget cuts. Dr.

School of Education
Office of the Dean

Oregon State University

Corvallis, Oregon 97331

April 25, 1980

TO: Dear Tucker

FROM: Chuck Stamps

RE: FIXED TERM APPOINTMENT OF DIANNA KALE

I concur with Lee Jenkins, Division Coordinator of Teaching Specialties, that we do not renew Dianna Kale's Fixed Term appointment in Art Education for the academic year 1980-81. Attached is a copy of his letter.

There are several reasons why I agree with Dr. Jenkins:

1. It is imperative that the School of Education have an art educator who has graduate faculty status. While the majority of our art education students are enrolled in the undergraduate program, we lack the ability to enroll graduate students in art education since they would have to pursue the degree through Education.

2. There is a need to have additional School of Education Graduate Faculty since those who agree to serve as major professors have heavy loads.

3. It would greatly strengthen our staff if we hired an art educator who could teach both elementary and secondary art classes and methods of elementary and secondary art classes, could serve as an advisor to undergraduate and graduate students, and also possessed skills in graphics and media.

cs
Attachment

DEFENDANT'S EXHIBIT 3784 H2

COPY

School of Education Oregon State University Corvallis, Oregon 97331

April 25, 1980

TO: Chuck Stamps

FROM: Lee Jenkins, Coordinator
Teaching Specialties Division

RE: DIANA KALE--ART EDUCATION

It is my opinion that the Art Education position at Oregon State University needs to be filled with a person who has completed their doctorate. With the State Board of Higher Education's decision to have no liberal arts graduate work at OSU and with the only art person in the school of education ineligible for graduate faculty status, we've got a problem.

For two years, I've been hearing that Diana Kale's dissertation is getting done "this year." It is possible that her slowness in completing brochures, posters, advertisements, etc., is also carried over into her dissertation slowness. I have no evidence that her dissertation is being completed and recommend that Dean Tucker advertise for a full-time person in art education with a second teaching area. The graduate load is heavy here, and I feel we don't need any more faculty members who are not eligible for graduate faculty status.

My perception is that Diana Kale has been given an "opportunity of a lifetime." She has been given the chance to build the art program at OSU and the freedom to innovate while working at a salary higher than that of a GTA and while completing her doctorate. She has not taken advantage of this opportunity.

DEFENDANT'S EXHIBIT 3784 I R

Barr succeeded Dr. Tucker as Dean of the School of Education before any action was taken upon her recommendations. Dr. Barr created an ad hoc faculty committee for budget and program reductions. Each department of the School of Education was represented, as well as a representative of the classified and fixed-term employees.

Ms. Kale represented the fixed-term contract faculty on the ad hoc committee. She was given a list of fixed-term and non-tenured faculty members at the School of Education. She noted from the list and thereafter informed the committee that the majority of the fixed-term faculty were women.

Ms. Kale testified that the ad hoc committee recommended that the School of Education's priority system be followed. (Tr. 7,875). Ms. Kale was asked:

> Q [By Mr. Willner] And the priority system, what did that do to the fixed-term jobs?
>
> A It really did not necessarily point out a fixed-term position. Rather, it said that certain programs and types of programs would be dropped. But the impact was upon the fixed-term positions in that a number -- the majority of the positions cut were with fixed-term, and only one annual track person was cut.

(Tr. 7,875-76).

Ms. Kale asserts that five positions were eliminated in accordance with the priority system, including her own. Four of the people in these positions were women and one was a minority man. She asserts that this termination of women and minorities in the School of Education suggests a pattern of discrimination which adversely affects women. (Plaintiffs' Rebuttal Findings of Fact No.17).

All disparate impact type claims have been excluded by the court. See Opinion and Order of August 10, 1984. In order to prevail, Ms. Kale must show that she and other women were treated differently because of their sex in the process of budget reductions. Ms. Kale admits that the School of Education's priority system was followed in order to determine which programs were to be reduced or eliminated and which staff were to be terminated. In order to prove disparate treatment under these circumstances, Ms. Kale must show that the School of Education's priority system was, in fact, one of differentiating on the basis of sex or a pretext for sex discrimination.

The 1982 budget reduction program was a crisis situation affecting many of the programs in the School of Education,

including the art education program. In addition to the five individuals named by Ms. Kale, the reduction affected people in foreign language education, drama education, journalism education, speech communication education, and language arts/social studies education.

Dr. Barr testified that he prepared and circulated a document (Def. Ex. 3784 W) which was intended to outline the priorities and processes that the School of Education would utilize in order to accomplish the necessary program reductions. That document was relied upon by the ad hoc committee, of which Ms. Kale was a member, and contained the following section outlining the process of program eliminations:

> B. Program Eliminations. It will be necessary to eliminate some programs in the School of Education. This programmatic elimination does not directly

relate to budget cuts, but obviously it is involved in the pro cess. A number of criteria have been identified by the Chancellor of the Oregon State System of Higher Education. These criteria included the following:

1. Give first priority to preservation of quality education within the System.

2. Retain, to the extent possible, programs central to the missions of the institutions.

3. Protect programs directly related to economic development. The Chancellor's Office indicates that systematic program elimination will hopefully avoid the closure of any institutions in the state. Decisions regarding program elimination will be based on a careful Program Review in which priorities will be given on the following basis:

1. Doctoral programs and graduate programs with state wide mission.

2. Undergraduate certification

programs with statewide mission.

3. Graduate certification programs duplicated in some but not all areas of the state.

4. Graduate certification programs duplicated widely throughout the state.

5. Graduate programs not related to certification.

6. Undergraduate programs duplicated in some, but not all areas of the state.

7. Undergraduate programs duplicated widely throughout the state.

However, in each instance, faculty status, program quality, placement, enrollment, and cost per SCH, will be taken into consideration. Programs most vulnerable will be those duplicated widely on other campuses, staffed by fixed term or annual tenure, and where elimination will affect the fewest numbers of students and faculty. Also, every effort will be made to insure that decisions regarding programmatic elimination will be made on this campus.

(Emphasis in original).

Dr. Barr explained in his testimony that fixed-term faculty were in

vulnerable positions in terms of the budget reduction. He stated:

> The reason fixed terms were so vulnerable was that the budget reductions had to go into effect for the new fiscal year, and that left -- if you eliminated positions, you had to . . . eliminate either fixed term or first year annual tenure people, because the ... termination time for second year people was too long ... for it to occur in that shortened calendar kind of year.
>
> (Tr. 17,261)

Dr. Barr was aware of the impact of the program reductions on women and minorities. He asserts, however, that each action followed a School of Education program review, and decisions were based on criteria as outlined earlier which were reviewed and endorsed by the faculty advisory committees. Ms. Kale claims that in her particular case only the secondary art education

program was eliminated, which involved less than 33 percent of her salary. She argues that the decision to eliminate the remaining 67 percent of her position was the result of an adverse recommendation by Dr. Tucker on the day that Dr. Tucker allegedly made the "negative energy" remark discussed at length earlier. (See Plaintiffs' Rebuttal Findings of Fact #15). The evidence simply does not support this assertion. Dr. Tucker's preliminary recommendations were not followed by Dr. Barr after his arrival. Dr. Barr instituted an entirely independent process. He testified that in addition to the program reductions, budget cuts were being made. He explained that a recommendation was made that the faculty in the department of elementary education could absorb the teaching of

art to the elementary education majors. (Tr. 17,258). Although it was recognized that it could not be done nearly as well as it had previously been done, because of the budget crisis, the decision was made to eliminate Ms. Kale's entire position. Dr. Barr testified that a member of the elementary education department faculty had agreed to teach the art classes the following fall. This was prior to the merger of the OSU School of Education with the WOSC School of Education.

After OSU had eliminated a significant portion of the School of Education program (including Ms. Kale's position), a merger was proposed between the OSU School of Education and the WOSC School of Education located about 20 miles away. The purpose of the merger was to meet and fend off future budget

crises without diminishing the quality of the education program. (Tr. 17,229). As a part of the merger between OSU and WOSC, James Kirk now teaches the art education courses formerly taught by Ms. Kale.

Undoubtedly, fixed-term positions in the School of Education were disproportionately affected by the 1982 budget cuts because they could be eliminated quickly in a time of fiscal crisis. However, this court cannot say that the processes outlined by the Board were pretexts for sex discrimination or were arrived at because the fixed-term faculty were disproportionately women. Ms. Kale has failed to prove that the elimination of her position, or any other position eliminated by the budget crisis, was influenced by the sex of the faculty member holding the position.

Ms. Kale cannot prevail on her individual claims of sex discrimination.

Kale Footnotes

1. Mr. Moeller came to OSU in 1973 without his doctorate and was terminated in 1978 because he had not finished his doctorate, despite the fact that because of his field he would be difficult to replace.

2. Mr. Moeller came to OSU five years before Ms. Kale.

3. The record contains insufficient evidence for the court to discuss this later claim.

DR. MARGARET LUMPKIN

Dr. Margaret Lumpkin, a professor of education at Oregon State University (OSU), who retired on December 31, 1984, filed a charge of sex discrimination with the Equal Employment Opportunity Commission (EEOC) on June 3, 1981. Dr. Lumpkin claimed that she was discriminated against because of her sex in that (1) during most of the years that she and Dr. Fred Fox were at OSU, Dr. Lumpkin received a lower salary than Dr. Fox, although he was an equally qualified male performing substantially the same job as she performed; and (2) other than the last year that he taught, Dr. Albert Leeland received a higher salary than Dr. Lumpkin, even though he was a less qualified male who performed substantially the same job as she performed; and (3) when Dr. Lumpkin

accepted an early retirement agreement in 1982, she received a less favorable salary adjustment than men who were retiring at approximately the same time. She received a Right to Sue Letter from the EEOC on June 25, 1982.

Dr. Lumpkin received a B.S. degree from the University of North Carolina in 1944; an M.S. degree from Wellesley College in 1945; and a Doctor of Education degree from OSU in 1957. From 1945 to 1948 she was an instructor at the University of Virginia. In 1948 she came to OSU as an instructor in the Physical Education Department. She remained in the Physical Education Department for five years. The last year she was in the Physical Education Department she was promoted to assistant professor. Then she served as an assistant to the OSU

Dean of Women for one year (as an assistant professor) and taught at Corvallis High School the next year. In 1955 she returned to OSU as a part-time instructor in the School of Education and as a doctoral candidate. In 1957 she received her doctorate and a full-time appointment as an instructor [1] in the School of Education. She was promoted to assistant professor in 1960; to associate professor in 1966; and to professor in 1970.

Dr. Lumpkin's specialties are in the fields of psychology, adolescence, child psychology, school organization politics, and civil rights laws in the school. Dr. Lumpkin has an extensive record of scholarly work. In her early career, she wrote three articles on health and physical education. Since 1973, she has co-authored twelve refereed

articles in two or three different journals and a chapter in a book. She has assisted with two Northwest Regional Lab grants and co-authored a reference book.

SALARY CLAIMS

Dr. Lumpkin claims that because of her sex she was discriminated against in terms of salary throughout her career at OSU. However, in 1972 OSU entered into a conciliation agreement with the United States Department of Health, Education and Welfare (HEW) concerning, in part, the salaries of faculty women. A committee had been formed which studied and compared the pay of faculty men and women. As a result of that study, most women's salaries were "equalized." In fact, Dr. Lumpkin's salary was increased from $12,585 to $16,000. Dr. Lumpkin contends that from the time of the 1972

OSU-HEW conciliation agreement to the filing of this lawsuit in April, 1980, the salaries of many faculty women who were awarded increases in 1972 had slipped below their comparators. She claims she is one of those women.

Dr.Lumpkin makes no assertion that the 1972 conciliation agreement was flawed or failed to correct the problem it was intended to correct. Accordingly, the focus of this court's inquiry will be the salaries of Dr. Lumpkin and her comparators from 1972 forward.

Dr. Lumpkin claims she has received a lower salary than her comparators, Dr. Fox and Dr. Leeland. Therefore, the court must first determine whether Dr. Fox and Dr. Leeland are equally qualified males who have performed substantially the same job as Dr.Lumpkin.

Dr.Fox received a B.S. degree from Miami University of Ohio in 1942 (two years ahead of Dr. Lumpkin), an M.A. degree in science education from Ohio State University in 1949 (four years behind Dr. Lumpkin), and a Ph.D. degree in science education from Ohio State University in 1957 (the same year Dr. Lumpkin received her doctorate). From 1947 to 1956, he was an assistant professor of education at Miami University of Ohio. He came to OSU in 1957 as an assistant professor. He was promoted to associate professor in 1961 and full professor in 1966. His specialty is in the area of science education.

Former Dean of the School of Education, Dr.Sylvia Tucker, described Dr.Fox as "a magnificent human being" about whom no one, -- student, faculty,

or administration, -- said "anything but positive things." She also said he is respected nationally as a science educator. Former Assistant and Associate Dean of the School of Education, Charles Stamps, said Dr.Fox is "highly respected." Current Dean of the School of Education, Robert Barr, who came to OSU from Indiana University, said that Dr.Fox has a national reputation in science education.

In the area of teaching, Dr. Lumpkin said that her teaching abilities and those of Dr. Fox are comparable. Former Dean Tucker said that Dr. Fox's evaluations as a teacher surpass Dr. Lumpkin's. Former Assistant and Associate Dean Stamps testified that Dr. Fox has a reputation as a master teacher and as an outstanding professor and that Dr. Lumpkin's evaluations are less

favorable than his. Both Dr. Stamps and Dr. Tucker evaluate Dr. Fox higher than Dr. Lumpkin in the area of graduate education and acting as graduate student adviser.

In the area of research, Dr. Stamps ranks Dr. Fox ahead of Dr. Lumpkin, although they do entirely different kinds of research. Dr. Tucker expressed some reservations about Dr. Lumpkin's publication list, saying that her publications are in part based on the research of a colleague. Again, more importantly, Dr. Lumpkin described Dr. Fox's research as comparable to her own.

In the area of service, Dr. Lumpkin rates very high. Dr. Tucker said she is "as service oriented as any faculty member in the School of Education." The court concludes that Dr. Lumpkin rates higher in the area of service than Dr.

Fox, but that in considering all of their qualifications, including teaching and research, Dr. Fox is an equally qualified male performing substantially the same work as Dr. Lumpkin.

The court will now compare Dr. Leeland's qualifications, experience, and workload with those of Dr. Lumpkin. Dr. Leeland received a B.A. degree in 1947 (three years after Dr. Lumpkin) and an M.A. degree in 1949 (four years after Dr. Lumpkin), both from the University of Northern Colorado. He received a Doctor of Education degree in 1952 (five years before Dr. Lumpkin) from Columbia University. He came to OSU as an assistant professor in 1954 (three years before Dr. Lumpkin came to the School of Education) and was promoted to associate professor in 1960 and to professor in 1963. He specializes in the area of

elementary education. Dr. Leeland is different from Dr. Lumpkin and Dr. Fox in that he had considerable teaching experience at the elementary level before coming to OSU. Since he specializes in the area of elementary education, this practical experience is an important factor. However, in the areas of teaching, scholarly activity, and service, Dr. Leeland is not as highly respected as either Dr. Lumpkin or Dr. Fox, although he has three years more service at OSU than they do.

The salary figures from 1972-1982 for Dr. Lumpkin, Dr. Fox, and Dr. Leeland are as follows:

Year	Lumpkin	Fox	Leeland
1971-72*	12,586	14,004	17,122
1972-73	16,500	16,500	17,292
1973-74	17,230	17,100	17,892
1974-75	17,869	17,738	18,637

1975-76	20,196	20,250	20,781
1976-77	22,212	22,887	22,653
1977-78	23,409**	25,083	24,273
1978-79	25,560	26,334	24,273
1979-80	25,884	26,334	25,974
1980-81	28,125	28,305	28,053***
1981-82	29,250	33,138***	retired

(Pl. Ex. 169-A).

Average per year over period

21,711	22,515	21,695

* OSU-HEW Study
** Not including division coordinator stipend
*** Includes retirement raise

Before the court examines how salary decisions are made at OSU in order to determine whether there was sex discrimination in the setting of Dr. Lumpkin's salary, it is important to note some of the differences in these salaries: at various times each of these faculty members was paid more than

one of the others. Dr. Leeland was paid more than either Dr. Fox or Dr. Lumpkin in the first five years, probably because he had more seniority than they had. Dr. Fox was paid more than either Dr. Leeland or Dr. Lumpkin during the last five years that all three were employed. Dr. Lumpkin, although never paid more than both Dr. Fox and Dr. Leeland, exceeded each at various times (Dr. Lumpkin over Dr. Fox in 1973 and 1974; Dr. Lumpkin equal to Dr. Fox in 1972; Dr. Lumpkin over Dr. Leeland in 1978 and 1980.) Dr. Fox's 1981-82 salary and Dr. Leeland's 1980-81 salary were both affected by increases made in anticipation of their retirements and are not entirely the result of merit. Thus, the salary comparisons for the year 1980-81 as to Dr.Leeland and 1981-82 as to Dr.Fox are distorted, as is

Dr.Leeland's 1979-80 salary compared to Dr.Lumpkin's.

While Dr. Leeland's salary exceeded that of Dr. Lumpkin for the first five years, Dr. Lumpkin's salary exceeded Dr. Leeland in 1978-79. The lead was reversed the following year and reversed again in 1980-81. Over the period from 1971-72 to 1980-81, Dr. Lumpkin's salary increases were substantially more than Dr. Leeland's. The difference in salary as of 1971-72 is explained by seniority. The fact that Dr. Lumpkin's salary caught up and finally exceeded Dr. Leeland's salary is explained by the larger merit increases she received for superior performance in the areas of teaching, scholarship, and service. No inference of sex discrimination can be drawn from comparing the salaries of Dr. Lumpkin and Dr. Leeland.

Again, as to Dr. Lumpkin and Dr. Fox, their salaries remained very close once Dr. Lumpkin's 1972 equity raise took effect. The 1981-82 comparison is distorted because of Dr. Fox's retirement raise. From 1972-73 to 1980-81, Dr. Fox's salary was higher for six years; Dr. Lumpkin's salary was higher for two years; and they were even for one year. The net difference over the years is less than $400 per year.

Dr. Fox's salary began to exceed Dr. Lumpkin's in 1975-76, which is the year when Dr.Sylvia Tucker became Dean of the School of Education. Dr. Tucker testified that the salary differential in favor of Dr. Fox was based on performance and that the differentials were warranted and documented.

The court will now turn to

Dr.Tucker's general explanation for the salary decisions that she made.

Q [By Mr. Casby] And I wonder if you could describe to us what process that you engaged in, what structure was involved in deciding who got what?

A When the salary decisions were made, they were made, first of all, on the basis of the amount of money that came down to us from the university.

There was an allocation from the State Board of monies for salaries to each university, then the president and his administrative staff determine how much would be given to each school.

Within the school of education and within the other schools and colleges of Oregon State, there was a designated amount based on the number of FTE and based upon the number of students, based upon several factors. But -- but it was equitable.

The school of education got money in the same way that the other units of the -- of the university got money.

We were told what our salary allocation would be. We were given guidelines by which we were to allocate these monies.

For instance, if -- if there would be available a 7 percent, approximately a 7 percent quote raise, then we would get 7 percent of -- times the number of faculty members we had with some -- some

allocation for whatever would be deemed necessary within a unit. Science might have some special needs, business might have some special needs.

So in that case, then if there were -- if there was a 4 percent raise, across-the-board raise, then that was automatic. That would leave then 3 percent merit pay or merit pay (sic). If we had any equity raises that we wanted to work on, if we had a class of people for instance. For instance, one year all full professors, it was suggested that we pay special attention to -- to full professors who by some standards were paid lower at Oregon State than some of the major universities in the country.

If we had a 3 percent merit pay or 3 percent amount of money which we could use for the things within the -- within the school of education that were necessary, then we would -- we would allocate it, I would allocate it to the division within the school. And I would say -- we would all get together and I would say this is the money that we have and we need to keep a couple percentage points of the money or 3 percentage points for raises within the administrative staff, special merit that we deem necessary. The rest of it went to the departments or to the divisions.

The division coordinator then had the obligation to bring back to me the merit raises as she saw them. If they were 3 percent, we would on first blush say, why don't we look at 1 percent merit for

teaching, 1 percent merit for research and 1 percent for service.

Then the cord -- the division coordinator would take the evaluations from the faculty and in some cases sit down with the faculty and would say, this is how I view your performance in these areas. I'm going to recommend X number of dollars, which is -- is a percent for service, a percent for teaching. I don't see research activities on your part, so I'm not going to award that percentage point. So that with every faculty member the coordinator would act in that fashion.

With written documentation the coordinator would then bring that documentation back with the recommendations that here she was making to me, and we would sit down individually and I would listen to what the coordinator would say about why here she was recommending this particular salary raise. And --

. . .

A And then after we talked about it and there was some agreement between the coordinators and me, and also the documentation for the -- the raise was adequate, then we normally would get all the coordinators together and the rest of the administrative staff, and we would go over all of these again.

And I often would go to the Board and I would say, okay. These are the recommendations for this kind of

percentage raise, and these are the reasons why coordinator X is recommending this raise.

And in some cases it worked out to faculty members benefit when we got everybody, when we got all the coordinators and administrators together because another coordinator would say, well, gee, this person does some work with our department, too. I don't know whether you're fully aware of that. But that's the way we would do it. And sometimes we would change those to make them more equitable. And people could see that there was another little bit of salary available. And they would say, well, gee, I've a really superb person who's done outstanding research, they have gotten a couple hundred thousand dollars in grants, they have done all these things. And sometimes within the total meeting, we would -- would again change. But that's -- that's how the merit -- merit pay was -- was designated. (TR. 17,795-98)

Specifically, Dr.Tucker explained the salary differences between Dr. Lumpkin and Dr. Fox as follows:

Q [By Mr. Casby] Okay, now, I wonder if you would just indicate to us why those differences developed.

A Well, they would be the direct result of recommendations to me as dean during the early years, 1975-'76. And those determinations would have been based to the best ability of the coordinator, and

the relationship with me would be based on performance of the individual.

Q And with reference to your knowledge of -- in the area of performance, as you described it, were those differentials warranted or not?

A Yes, I believe they were. I think that any differential in salary that occurred was warranted and was documented. I kept a constant vigilance on the salary. As a matter of fact, one of the first things that I did when I went to Oregon State was to do a salary history to see where the salaries were and to see whether or not there were any gross inequities and to see whether those inequities had been corrected at some period. And I -- I kept -- I kept this long chart which -- which was the historical study, which I believe is available to -- to anyone, which -- which kept me in constant -- in a constant state of alert about the salaries.

And it becomes difficult, when the salaries are based on performance and they're documented to be so, when you see a little differential creeping in, but you -- you -- if you believe in merit pay, as I do, then those differentials will occur.

(TR. 17,828-30).

Dr. Tucker's testimony that the salary difference between Dr. Lumpkin and Dr.Fox was based upon individual

performance is a legitimate, non-discriminatory reason for the employment decision. Dr. Lumpkin offers no evidence that the offered explanation is other than credible or a pretext for discriminatory bias. While individual performance is a subjective criterion that may be offered to mask sexual bias, there is no evidence in this instance that would support that conclusion. In academic and professional employment situations, courts are reluctant to second-guess subjective decisions made by employers or to impose on a defendant the court's evaluation of the quality or merit of individual achievement. Any further action the court could take would be no more than an attempt to re-evaluate what Dr.Tucker has already evaluated on entirely permissible grounds.

Dr. Lumpkin cannot prevail on her salary claims.

RETIREMENT CLAIM

In her second claim of sex discrimination, Dr. Lumpkin contends that when she accepted an early retirement agreement, she received a less favorable salary adjustment than males who retired at approximately the same time.

Beginning about 1981, OSU faculty members nearing retirement age were offered incentives to retire earlier than they might otherwise. Early retirement plans were seen as a way for institutions faced with financial problems to save money. Higher paid older faculty could be replaced by lower paid junior faculty. The early retirement plans generally include a predetermined date for a relinquishment

of tenure and retirement by the faculty member in exchange for an immediate percentage increase in his or her base salary. The other terms of the early retirement agreement are negotiated; for example a faculty member seeking early retirement could bargain for a 600 hour per year teaching or service contract or series of contracts over an agreed number of years. During the period prior to the retirement date, the faculty member would receive any other across-the- board or merit increases awarded.

Dr. Lumpkin testified that she had learned that certain male faculty members had received retirement salary increases which exceeded her increase and the increase of other women faculty members. Dr. Lumpkin compared the retirement increases of male faculty members Gordon Anderson, Fred Fox, Glen

Clark, and Glenn Klein to the retirement increases of female faculty members Jean Severeide and Mary Jane Wall, as well as her own. The only evidence that plaintiff offered to support this claim was the testimony of Dr. Lumpkin as follows:

Q [By Mr. Willner] Dr. Lumpkin, at the same time that you entered into a retirement agreement, were there other faculty members in your department that entered into the same retirement agreement, or into a similar retirement agreement?

A There were other faculty members in our school that did.

Q All right. And what incremental benefit did you receive in return for retiring?

A I received a six percent increase on my base salary.

Q All right. And who were the other people who entered into agreements at approximately the same time and say what they received and identify which were male and which were female?

A There were four of us at the same time. Glen Clark, male.

Q And what did he receive?

A He received an aggregate 32 percent.

Q Who was the next person?

A I retired. I will be retiring. And I received an aggregate 22 percent. That is considering the three years that we are speaking of.

Q All right.

A Jean Severeid.

Q Male or female?

A Female. Retired. She received 24 percent. And Mary Jane Wall, 23 percent.

Q Is Mary Jane Wall a female?

A Yes.

Q Were there other males that retired at the same time?

A There were other males who retired approximately the same time.

Q What are their names? What are they receiving?

A Gordon Anderson. He was a professor who came in 1962. He received 40 percent. Fred Fox. It's hard to calculate. He received 17 percent one year but he's on a 600 hour appointment the last two years and he has chosen not to take that and to serve 600 hours, but his salary would have been raised so it's

very hard to com pare what would happen there.

Glen Clark, professor of education, he received a 39 percent raise. Glen Kline, professor of extension education. He received a 33 percent raise. (TR. 2807-08).

This testimony is not sufficient for the court to evaluate Dr. Lumpkin's claim. However, Dr.David B. Nicodemus, Dean of Faculty at OSC, described Dr. Lumpkin's early retirement agreement as follows:

Q [By Mr. Casby] Now, with reference to that, could you describe to us the substance of the retirement agreement with respect to Margaret Lumpkin? What I particularly -- I was just going to be more specific in that the date it was signed, in other words, when the agreement took place and the date it was to be effective, and then what monetary inducements, what monetary provisions there were in it.

A Professor Lumpkin, after the president approved it with the dean's recommendation, accepted an early retirement agreement, which would be in accordance with the institutional policy, providing her a one-time six- percent special salary adjustment to be effective for three years prior to her retirement

date. The retirement date in Margaret Lumpkin's case was chosen. She elected December 31, 1984.

Q When was --

A And so this six percent adjustment was made effective as of and I believe retroactively back to July of '82. So it would apply for the calendar years '82, '83, and '84. This was one of the conditions of the retirement agreement. (TR. 17,351).

. . .

Q [By Mr. Casby] And now that you have referred to the actual agreement, . . . can you indicate to us what other aspects there are on this agreement besides the six percent increase for a three-year period?

A The second of the retirement agreement incentives is provided -- provides for 600-hour appointments for Professor Lumpkin for two years following retirement for each of two years. (TR. 17,353).

Dr.Nicodemus described the various individual agreements as contrasted below:

FEMALE FACULTY	MALE FACULTY
LUMPKIN	CLARK
School of Education Retired 12/31/84	School of Education Retired 12/31/82

6% salary adjustment retroactive

three years; 600 hour appointment for two years after retirement.

6% salary adjustment retroactive one year and one term; 600 hour appointment for five years after retirement.

WALL
School of Education
Retired 12/31/84

6% salary adjustment retroactive three years; hour appointment five years after after retirement.

ANDERSON
College of Health & Phys Ed
Retired 9/1/82
13% salary adjustment for first year 600 600 appointment; no retro-for active adjustment; years 600 hour appointment for two years after retirement.

SEVEREID
School of Education
Retired 12/31/84
6% salary adjustment retroactive three years; 600 hour appointment for four years.

FOX
School of Education
Retired 6/30/82
13% salary adjustment '81-'82 academic year including the average faculty salary adjustment for that year of 6%.

KLEIN
No early retirement agreement with Oregon State University.

(TR. 17,351-363).

Early retirement agreements are individually negotiated between faculty

members and OSU. This accounts for the variations in the terms of the agreements. Dr. Lumpkin does not dispute the accuracy of the agreements as stated herein. A comparison of the men's and women's agreements shows that the women negotiated better agreements than the men; that is, the women received better retroactive salary adjustments than the men received.

Apparently, Dr. Lumpkin's testimony describes retirement income in terms of a percentage of salary prior to retirement. See, Testimony of Dean Nicodemus at Tr. 17,366. For example, she testified that Clark received "an aggregate 32 percent." Dr. Lumpkin presented no evidence as to how the retirement income is calculated or how the method of calculation adversely

affects women. Dr.Nicodemus testified that the retirement income for each individual is calculated by the Oregon Public Employees Retirement System, based upon a number of factors including highest average salary for three out of the last ten years of employment.

If Dr. Lumpkin's claim is that this system of calculating retirement income is sex biased, the proper defendant is not before the court, and no evidence has been presented to explain the source of the bias. If Dr. Lumpkin's claim is that OSU treated her and other female faculty members less favorably than male faculty in the terms of their individual early retirement agreements, resulting in their receiving lower retirement income than men, the evidence does not support this claim.

Dr. Lumpkin cannot prevail on her retirement claim.

Lumpkin Footnotes

1. At this time had been at OSU three years and was an assistant professor. Dr.Fox was also appointed in 1957, but as an assistant professor. Dr. Lumpkin claims that since she was appointed an instructor instead of an assistant professor in 1957, she was

always behind her comparators in obtaining rank, and this adversely affected her salary thereafter. There is no evidence before this court of the facts or circumstances surrounding Dr. Lumpkin's hiring in 1957. There is nothing to suggest that her rank at hire was discriminatory, but in any event, any salary inequities were adjusted in 1972.

OREGON HEALTH SCIENCES UNIVERSITY

PORTLAND, OREGON

Polly Ann Fisher

Ann L. Hoffstetter

Dr. Jane Siegel

POLLY ANN FISHER

Polly Ann Fisher, a part-time staff and charge nurse at St.Vincent's Hospital in Portland, Oregon, claims that she was discriminated against because of her sex while she was employed at the School of Nursing at the Oregon Health Sciences University (OHSU) in that (1) she received less pay than equally qualified men performing substantially the same job; (2) she received less satisfactory offices than equally qualified men performing substantially the same job; and (3) she received no direct pay for certain of her duties on the faculty practice plan, while equally qualified men performing substantially the same job received direct pay. Ms. Fisher intervened in this action as a named plaintiff without filing a charge of

discrimination with the Equal Employment Opportunity Commission.

Ms. Fisher received a B.S. degree from the University of Oregon School of Nursing in 1972, and a Masters Degree in nursing from the University of Washington in 1976. Before coming to OHSU in 1974, Ms. Fisher worked for a year at Dammasch State Hospital in Wilsonville, Oregon, as a staff and charge nurse. In her faculty position at OHSU, she supervised students who had no prior psychiatric nursing experience in an acute, in-patient care center. She also had research and community service responsibilities, including service on the Admissions Committee and the Student Grievance Committee. She was a member of the three-school faculty group that interviewed candidates for the presidency of OHSU.

SALARY CLAIM

Ms.Fisher has no complaint about her salary as it compares to the salaries of other faculty in the School of Nursing at OHSU. Her complaint is that she is not paid as much as faculty in the School of Medicine and School of Dentistry at OHSU.

At the end of her direct testimony, Ms.Fisher gave this testimony:

> Q [By Mr. Willner] All right, do you have any complaints about your treatment as a faculty member within the School of Nursing?
>
> A Not within the School of Nursing, no.
>
> Q And what is your -- what is the basis of your complaint about -- have you raised a complaint about your pay in this case?
>
> A Yes.
>
> Q And what is the basis for your complaint?
>
> A That as a group, nursing faculty were paid less than men with comparable responsi-

> bilities, qualifications, education in the other two schools. [Medical and dental schools.](Tr. 3758).

Ms. Fisher's claim is a comparable worth claim. She claims that nursing school faculty receive less pay than medical school faculty and dental school faculty because the nursing school faculty is composed primarily of women and the medical school faculty and dental school faculty are composed primarily of men. Ms.Fisher also claims that, in general, the School of Nursing receives less monetary assistance from the Oregon State Board of Higher Education than the medical and dental schools because the faculty and students in the School of Nursing are primarily women.

The decision in Spaulding v. University of Washington,740 F.2d 686 (9th Cir. 1984), precludes Ms.Fisher's

comparable worth claim. See Opinion and Orders of August 10, and September 13, 1984.

Insofar as Ms.Fisher attempts to prove that nursing school faculty are not treated as well by the Board as the medical school faculty and the dental school faculty, she has failed to do so. During 1978 and 1980, each school at OHSU had its budget reduced by the same percentage. (Tr. 3756). Ms. Fisher claims that this was unfair because "the School of Nursing had a disproportionately smaller amount from which to cut." (Pl. Proposed Findings of Fact No.9). However, since the nursing school's budget was smaller than the budgets of the medical and dental schools, the actual dollar amount cut from the nursing school budget was less than that cut from the budgets of the medical and dental

schools. Moreover, the budgets of the medical and dental schools were very low compared to other medical and dental schools nationwide, and the budget cuts were as damaging to the medical and dental schools as they were to the School of Nursing. In fact, by 1981 the School of Nursing was better off in comparison with nursing schools at other institutions than were the medical and dental schools in comparison with medical and dental schools at other institutions. Salaries at the School of Nursing were comparable to other schools of nursing in the western part of the United States, while the salaries at the medical and dental schools continued to be below comparable medical and dental schools in the western part of the United States.

Ms. Fisher cannot prevail on this

part of her claim.

OFFICE SPACE

Ms. Fisher claims that she was given less satisfactory office space than were men at OHSU because of her sex. The office space provided to Ms.Fisher and other nursing school faculty in Emma Jones Hall was crowded, unpleasant, and run-down. However, faculty members in the Family Practice Department in the School of Medicine were also housed in this building.(Tr.20,530). Unfortunately, OHSU has many substandard physical facilities. Significantly, however, there is no evidence that women faculty in the medical or dental schools received less adequate office space than men in those schools.

The court concludes that to the extent that nursing school faculty have received less desirable offices and other

perquisites (such as parking) than have medical school faculty or dental school faculty, the differences in treatment do not result from any sex-based discriminatory animus on the part of the Board, but rather result from differences in professional affiliation, a legitimate, non-sex-based distinction permissible under Spaulding.

FACULTY PRACTICE PLAN

Ms.Fisher's final claim involves her faculty practice plan duties. Faculty at health care institutions often spend a certain amount of time practicing in their area of expertise.Ms.Fisher worked about 360 hours a year in nursing service at University Hospital, in return for which her salary was changed from a nine-months' to a twelve-months' salary. This means that she received three months'

salary for approximately nine, 40-hour work weeks.

Ms.Fisher complains that while her responsibilities included charting the patients' progress in the "Physician's Progress Notes" section of the patients' charts, she was not allowed to bill University Hospital directly for such activities while medical school faculty were allowed to bill University Hospital directly for these activities. University Hospital pays to the Dean of the School of Nursing compensation for the services provided to University Hospital by individual nursing school faculty members. University Hospital pays no monies directly to faculty members in the School of Nursing.

There is great diversity with regards to the School of Medicine-University Hospital practice plan

arrangements. Most faculty in the School of Medicine in the clinical departments must generate a significant portion of their own salary through patient care in an in-patient as well as an out-patient setting. Fees are charged by medical school faculty for those services.Each department of the medical school handles these funds separately. In the Department of Surgery, practice plan funds are handled on an individual-by-individual basis. In the Department of Pediatrics, practice plan funds are handled through a department partnership. In some departments there may be more than one partnership.

More importantly, however, the nursing faculty from the School of Nursing who render services to University Hospital do not perform the same "services" as the physicians from the

medical school. This court rejects the notion that a physician and a nurse must be paid the same when they perform the very same activities, such as charting the patients' progress in the"Physician's Progress Notes" section of the patients' charts. As the Spaulding court noted, in determining whether jobs are substantially equal and hence must be paid the same, a court must take into account the experience, training, and responsibility required by the positions. Physicians must have more education and training than nurses, and they carry the ultimate responsibility for the well-being of their patients. The court concludes that if Ms.Fisher was paid less for her practice plan work than physicians, it was not due to the fact that she is a woman rather than a man.

It was due to the fact that she is a nurse rather than a doctor.

Ms. Fisher cannot prevail on her individual claims.

ANN L. HOFFSTETTER

Ann L. Hoffstetter, Director of Auxiliary Services, and an assistant professor at Oregon Health Sciences University (OHSU), claims that she was discriminated against because of her sex in that (1) she was denied a promotion to the position of assistant vice-president of OHSU in 1981; (2) from 1981 to the present, she has been paid less than equally qualified men who perform substantially the same job as she performs; (3) she has been provided less comfortable office space than has been provided to equally qualified men; and (4) she was not included in staff meetings attended by male administrators when she was entitled to be included. Ms. Hoffstetter intervened in this action as a named plaintiff without filing a charge of discrimination with

the Equal Employment Opportunity Commission.

Ms. Hoffstetter received a B.A. degree in business administration from Portland State University in 1968 and a masters degree in public administration from Portland State University in 1979. Between 1945 and 1965, Ms. Hoffstetter worked in the private sector in payroll and cost accounting positions in various business operations including a large printing company, Coca Cola Bottling Company, and several accounting firms. From 1965 until 1969, she worked for the Oregon State Industrial Accident Commission as a senior accountant with responsibility for investments.

In 1969, Ms. Hoffstetter became employed at OHSU as an assistant manager in the classified services in charge of the accounting office, which included

general ledger accounting for OHSU, the cashier's office, parking services, and financial aid. At various times she has managed many of the business operations of OHSU including the bookstores for the School of Dentistry and the School of Nursing, purchasing, accounts payable, the residence hall, the mail service, and other auxiliary services. She increased productivity in every area that she managed.

She was a member of the board and President of the Western Association of College Auxiliary Services, and was appointed to the board of the National Association of College Auxiliary Services. She was voted the first woman president of that national organization. Ms. Hoffstetter published an article on budgeting and budget analysis in January, 1980, and an article on the nursing

school bookstore in October, 1983. The Board does not challenge Ms. Hoffstetter's skills, talents, or personal or professional achievements.

ASSISTANT VICE PRESIDENT FOR BUSINESS MANAGEMENT POSITION

Ms. Hoffstetter first claims that she was discriminated against because of her sex in that she was denied "promotion" to the position of Assistant Vice President for Business Management in 1981. The Board claims that a decision was made not to fill the position of Assistant Vice President for Business Management because of budgetary considerations, and that this decision was made independently of Ms. Hoffstetter's qualifications, experience, and sex.

In order to understand Ms. Hoffstetter's claim, the court will first discuss some of the background information regarding OHSU. The mission of OHSU is the education of students in the health professions, the conduct of research in biomedically-related disciplines, and the provision of health care to the public through hospitals and clinics. The institution has six major operating divisions: the School of Medicine, the School of Dentistry, the School of Nursing -- each headed by a dean -- and three clinical units: University Hospital, the Crippled Children's Division, and the Dental Clinics. The University Hospital and the Crippled Children's Division are headed by administrative officers called Directors, and the Dental Clinics are

headed by the Dean of the School of Dentistry.

The Oregon State Board of Higher Education is the governing body for the OHSU, as it is for the other seven institutions in the Oregon State System of Higher Education. In carrying out the day-to-day operations of OHSU, its administrative officers have administrative decision-making authority, but they must adhere to the general rules and regulations promulgated by the Oregon State Board of Higher Education in its Administrative Rules and Internal Management Directives. The President of OHSU, as its chief executive officer, has the authority to handle all matters relating to personnel, including appointment, promotion, tenure, salary increases, and evaluations. The only exception is that the Oregon State Board

of Higher Education must approve the appointment and salary level for the president and vice-president of OHSU.

Administratively, the deans of the three schools within OHSU and the directors of the clinical units are given substantial discretion to manage the resources of their units in order to fulfill the mission of the institution. The central administration monitors the expenditures of the six major operating units, alerting the Vice President and Assistant Vice President for Budget and Finance if problems arise or appear imminent.

In April, 1980, Dr. James T. McGill was hired as Vice President for Finance and Administration, one of three vice-presidents at that time.[1] Dr. McGill assumed administrative responsibility for many functions including personnel,

physical plant, computing services, and financial offices.

In his testimony, Dr. McGill explained that when President Leonard Laster recruited him in 1980 for the position of Vice President for Finance and Administration, Dr. Laster made it clear to him, as did the deans and directors at the OHSU, that they expected the new Vice President for Finance and Administration to make significant management changes. Dr. McGill explained:

> Q [By Ms. Abernethy] And what prompted you to under take this reorganization?
>
> A When President Laster was recruiting to the Vice President for Finance and Administration, he made clear to me as one of those candidates, as did the deans and directors at the University at the time, that there was an expectation of the new person to deal with what was perceived to be several problems of a

> managerial nature. Their feelings were supplemented by a pro bono or gratis study done by Arthur Young and Company, as I recall, regarding the organization of the office of the Vice President. In short, there were several adverse audit comments of a fiscal nature, of a problematic nature, of a performance nature at that time, there were changes that needed to be made in the administration so as to make sure that expectation of managers were made clear, to make the reporting lines somewhat more pyramidal rather than as flat. The acting vice president at the time had in the neighborhood of ten, as I recall, people reporting directly to him. The consultant said that was too many for a vice president to deal with.

(Tr. 19,182).

Pursuant to the expectations of the president, deans, and directors, in June, 1980, after 2 1/2 months on the job, Dr. McGill issued to all staff a memorandum entitled "Organizational Changes," in which he established new

reporting lines within the central administration. These "Organizational Changes" called for five assistant vice-presidents. A copy of that memorandum, Defendant's Exhibit 4509, follows this page.

The five assistant vice-president positions listed in Dr. McGill's Memorandum are:

Assistant Vice President for Budget and Finance;

Assistant Vice President for Facilities Management;

Assistant Vice President for Business Management;

Assistant Vice President for Information Systems;

Assistant Vice President for Management Services.

Ms. Hoffstetter's position was listed as "auxiliary services" and she was to

Date: June 30, 1980

To: All Staff in the Office of the Vice President for Finance and Administration

From: James T. McGill

Subject: Organizational Changes

MEMO

University of Oregon
Health Sciences Center
Portland

Effective July 1, 1980, the following reporting lines are established:

Vice President for Finance & Administration	James T. McGill
Assistant Vice President, Budget & Finance	James T. McGill (Acting)
Budget Office	Richard A. Stolz (Acting)
Research Services	Abdul O. Anani
Accounting	Bruce W. Palmer
Assistant Vice President, Facilities Management	Ralph E. Tuomi
Physical Plant	Ralph E. Tuomi
Facilities Planning	Gordon H. Ranta
Security	Richard C. Anderson (Acting)
Parking	Warren E. Davis
Instrument and Safety Service	George I. Johnston

Assistant Vice President, ~~Fiscal~~ Business Management	M. R. Parelius (Acting)
circle added by the court — Auxiliary Services	Ann L. Hoffstetter
Purchasing	Shirley J. Carey
Payroll	Irene Fulmer
Business Office	Cecil B. Burt
Accounts Payable	Phyllis Seid
Animal Care	Allan L. Rogers
Inventory and Surplus	G. Marvin Stephens
Student Activities Building	Benjamin R. Jensen
Assistant Vice President, Information Systems	M. R. Parelius (Acting)
Systems Development	TBA
Technical Support	George I. Johnston (Acting)
Assistant Vice President, Management Services	M. R. Parelius
Affirmative Action	William W. Jackson
Internal Audit	Hilton A. Talbert
Personnel	Bill R. Kribs
Contracts	Howard J. Dahlstrom
Special Projects	Monte R. Mullen

Please note that this display represents the reporting relationships of existing units. The organizational structure will be under continued review and is subject to change in the future.

JTM:mjh

DEFENDANT'S EXHIBIT 4509

report to the Assistant Vice President for Business Management.

Sometime during the summer of 1980, Ralph E. Tuomi was appointed Assistant Vice President for Facilities Management and M.R. Parelius was appointed Assistant Vice President for Management Services.[2] Mr. Tuomi had been the physical plant director before the reorganization. In his new position as Assistant Vice President for Facilities Management, Mr. Tuomi was responsible for the physical plant as well as security for parking and instrument and safety services. Mr. Parelius had been the Acting Vice President for Finance and Administration prior to Dr. McGill's appointment as Vice President for Finance and Administration. After Dr. McGill was hired, Mr. Parelius returned to his prior position as Assistant Vice

President for Business Services. In that position, he held many of the responsibilities of the position of Assistant Vice President for Management Services, to which he was appointed pursuant to the June, 1980 organizational change.

While two of the five assistant vice-president positions were filled during the summer of 1980 without a search, a search had to be conducted for the new positions of Assistant Vice President for Budget and Finance, Assistant Vice President for Business Management, and Assistant Vice President for Information Systems. Dr. McGill decided to advertise first for only two of the three positions: Assistant Vice President for Budget and Finance, and Assistant Vice President for Business Management. National and local

recruiting announcements were issued for these two positions in the late summer of 1980. Ms. Hoffstetter, who was then an assistant business manager, was notified. She applied for the position of Assistant Vice President for Business Management along with Cecil Burt, Director of the OHSU Business Office, and many other applicants .

About the same time that the recruitment process had begun, first the Governor and then the Legislative Assembly of the State of Oregon ordered budget cuts within the institution. Dr. McGill, in compliance with those orders, revised his plans for administrative changes as follows: (1) He decided not to recruit at all for the position of Assistant Vice President for Information Systems. Instead, he assigned the duties of that position to Mr. Parelius, the

Assistant Vice President for Management Services. (2) He placed "on hold" the recruitment for the position of Assistant Vice President for Business Management (the position for which Ms. Hoffstetter and Mr. Burt had applied). (3) He proceeded with the recruitment for the position of Assistant Vice President for Budget and Finance because of OHSU's prioritization of budgetary and fiscal matters. Peter Wollstein was hired as Assistant Vice President for Budget and Finance in December, 1980.

In the spring or summer of 1981, Dr. McGill decided to discontinue completely the search for an Assistant Vice President for Business Management. He wrote to all of the candidates, including Ms. Hoffstetter and Mr. Burt, to inform them that the search had been discontinued. At the time he decided to

discontinue the search, the field of applicants for the position of Assistant Vice President for Business Management had been narrowed to ten applicants. Ms. Hoffstetter and Mr. Burt were among those ten.

Ms. Hoffstetter claims that she was "denied a promotion to Assistant Vice President at OHSU in 1981," because of sex discrimination. (See Plaintiffs' proposed Findings of Fact #17). In order for her to prevail on this claim, Ms. Hoffstetter must show (1) that she was qualified for the position of Assistant Vice President for Business Management; (2) that she did not receive that position; and (3) that someone else received the position. In this case, the position was never filled. There is no evidence whatsoever that the position was not filled because Ms. Hoffstetter

was an applicant. The Board's explanation that the position was not filled because of budgetary reasons is supported by the evidence.

Ms. Hoffstetter cannot prevail on this claim.

SALARY CLAIM

Ms. Hoffstetter testified that sometime in the fall of 1981, she was called into Dr. McGill's office and told that he was not going to fill the position of Assistant Vice President for Business Management, but that he was going to "promote" Ms. Hoffstetter to the position of Director of Auxiliary Services. Thereafter, Ms. Hoffstetter was appointed Director of Auxiliary Services retroactive to September 15, 1981, with an annual salary of $31,126, a substantial increase in salary. Her status as a classified employee was

changed to assistant professor, an academic rank. Ms. Hoffstetter claims that her new position as Director of Auxiliary Services encompasses the same responsibilities as the advertised, but unfilled, position of Assistant Vice President for Business Management, except at a lower rank and salary than the position of Assistant Vice President for Business Management.

In support of her claim, Ms. Hoffstetter offers the organizational chart which became effective as of September 21, 1981. See Pl. Ex. 495A, which follows this page. Ms. Hoffstetter claims that this chart is proof that as Director of Auxiliary Services, she is in "exactly the same place" she would have been had she been hired as Assistant Vice President for Business Management. Ms. Hoffstetter argues that since she is

at the same organizational level and reports to the same per son as the assistant vice-presidents, she should be paid substantially the same salary as they are paid.

In comparing the responsibilities of her new position as Director of Auxiliary Services with the responsibilities of the Assistant Vice Presidents, Mr. Tuomi, Mr. Parelius, and Mr. Wollstein, Ms. Hoffstetter testified:

> Q [By Mr. Willner] All right, now, put down the budget of each of these four people as of October, 1981.
>
> ...
>
> A $2,882,134 for Tuomi, under $2 million for Parelius, under $700,000 for Wollstein.
>
> Q All right.
>
> A $2,583,653 for Hoffstetter.
>
> Q All right, . . . the present salary of each of you.

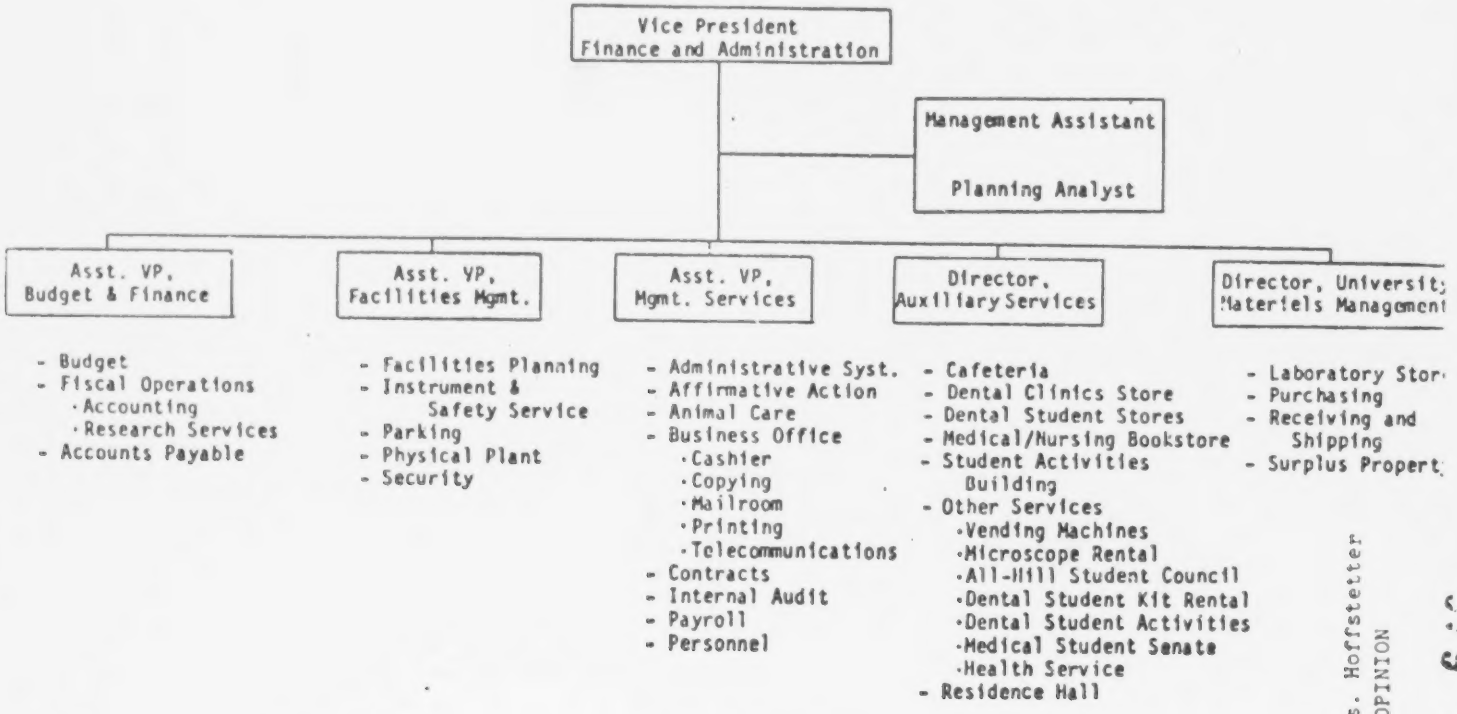
A Tuomi, $52,000; Parelius, $52,000; Wollstein, $55,000; Hoffstetter, $34,000.

(Tr. 6133).

The Assistant Vice Presidents, Mr. Tuomi, Mr. Parelius, and Mr. Wollstein, receive substantially higher salaries than Ms. Hoffstetter. Therefore, the court must determine whether the position of Director of Auxiliary Services was created as a guise for the position of Assistant Vice President for Business Management, the position for which Ms. Hoffstetter applied and which was never filled.

Dr. McGill testified on behalf of the Board that the budgetary squeeze during the summer of 1980 caused him to "rethink" the organizational plan he had proposed in June, 1980. He explained that the difference between the June 20, 1980, organizational plan and the

Organizational Structure
Vice President, Finance and Administration
Oregon Health Sciences University



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September 21, 1981, organizational plan was that there were three assistant vice-presidents in the September 21, 1981, plan rather than the five assistant vice-presidents contemplated by the June 20, 1981, plan. The responsibilities of the position of Assistant Vice President for Information Systems, which had never been advertised and had never been filled, were assigned to Mr. Tuomi, the Assistant Vice President for Management Services. That left unassigned the responsibilities of the position of Assistant Vice President for Business Management, which had been advertised but had never been filled. The question is: Did Ms. Hoffstetter assume substantially all of those responsibilities as Director of Auxiliary Services or were those responsibilities parcelled out to others as well as Ms. Hoffstetter.

The responsibilities proposed for the position of Assistant Vice President for Business Management in the June, 1980, organizational chart are:

Auxiliary Services

Purchasing

Payroll

Business Office

Accounts Payable

Animal Care

Inventory and Surplus

Student Activities Building

Dr. McGill testified that when the position of Assistant Vice President for Business Management was not filled, the duties proposed for that position were assigned as follows:

Auxiliary Services - to the Director of Auxiliary Services, Ms. Hoffstetter

Purchasing - to the Director of Materials Management (new position to be filled)

Payroll - to the Assistant Vice President for Budget and Finance, Mr. Wollstein

Business Office - to the Assistant Vice President for Management Services, Mr. Parelius

Accounts Payable - to the Assistant Vice President for Budget and Finance, Mr. Wollstein

Animal Care - to the Assistant Vice President for Management Services, Mr. Parelius

Inventory and Surplus - to the Assistant Vice President for Management Services, Mr. Parelius

Student Activities Building - to the Director of Auxiliary Services, Ms. Hoffstetter

The above listing shows that of the duties originally proposed for the position of Assistant Vice President for Business Management (the position for which Ms. Hoffstetter applied), Ms. Hoffstetter, as Director of Auxiliary Services, was only assigned "Auxiliary Services" and "Student Activities Building." Even then, however, Dr.

McGill testified that he removed Shipping and Receiving, Mail Room, Communications and Paging, and Research Stores from the Auxiliary Services duties assigned to Ms. Hoffstetter as Director of Auxiliary Services.

Dr. McGill also added to the Director of Auxiliary Services position some other auxiliary services-type duties that were not included in the June 30, 1980, organizational chart. These were Health Services, Student Activities Building, Student Government Accounts, Microscope Rental Account, and some smaller budgetary activities.

In summary, after budget reductions aborted the 1980 organizational plan, another organizational plan was developed in September, 1981. In the second organizational plan, there were three assistant vice-presidents. The duties of

the proposed Assistant Vice President for Information Systems were assigned to Mr. Tuomi; the responsibilities for the Assistant Vice President for Business Management were assigned to Mr. Tuomi, Mr. Woolstein, Ms. Hoffstetter, and to a Director of Materials Management, who was hired later. Furthermore, before the 1981 reorganization, the budget for which Ms. Hoffstetter was responsible was $1,023,451. After the 1981 reorganization, it was $981,214. Prior to the reorganization, Ms. Hoffstetter was responsible for 41.25 FTE positions. After the 1981 reorganization, she was responsible for 26 FTE positions. Ms. Hoffstetter does not challenge the accuracy of these figures. Dr. McGill prepared a chart showing the responsibilities in monetary terms between Ms. Hoffstetter and the assistant

vice-presidents for the fall of 1981 and the spring of 1982. A copy of that chart follows this page.

Finally, Ms. Hoffstetter argues that the effect of Dr. McGill's action in abolishing the position of Assistant Vice President for Business Management and creating the positions of Director of Auxiliary Services and Director of Materials Management is simply to create two lower paying positions filled by women. Ms. Hoffstetter points out that the combination of her salary and the salary for the Director of Materials Management is substantially more than the salary would be for the Assistant Vice President for Business Management position. Dr. McGill testified as follows:

> Q [By Mr. Willner] I will ask you a new question. The combined salary of Miss

Comparison of Responsibilities

	Hoffstetter Fall, 1981	Hoffstetter Spring, 1982
Hoffstetter		
xiliary Services	$1,023,451	$981,214
Operations	$3,559,344	$2,274,386
Total	41.25	26.00
ETE		

udget and Finance — Wallstrom

Operations	$ 700,163	$ 1,244,761
Total	$ 700,163	$ 3,687,013
FTE	34.50	62.50

cilities Management — Pete Tuomi

Operations	$ 13,919,977	$ 13,919,977
Total	$ 17,059,022	$ 17,059,022
FTE	165.00	165.00

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nagement Services Panelists		
Operations	[5/] 4,988,855	[#] 4,467,517
Total	[#] 5,498,617	[4] 5,799,781
FTE	145.56	120.31

Hoffstetter and Miss Stockinger [Director of Materials Management] was about $66,000. The salary of the Assistant Vice President for Business Management was advertised in the range of 40,000. Your comtemplation was paying about 41,000? Your advertisement gave that person responsibility for both auxiliary services and materials management. I want you to tell me again why it's a savings of money to hire two people for 66,000 instead of one person for 44,000?

A There was not a hiring of two persons. There was a hiring, as it turned out, of one new person that is the Director of Material Management. Miss Hoffstetter was already in the University and hence her salary did not represent any additional dollars other than the six per cent salary increase she received in September of 1981.

Q Did you testify in your direct examination that you were thinking about creating an additional position of assistant to the assistant vice president to focus on materials management?

A I testified yesterday that it had been my expectation that with the arrival of the

> Assistant Vice President for Business Management and as that part of the organization evolved that it would likely require the addition of yet another staff person in that organization probably having to do with material management therefore creating yet another new position.
>
> Had that evolved, had that evolved along that pattern, there would have been two new positions, the Assistant Vice President for Business Management and another manager under that person.

(Tr. 19,355-356).

The court concludes that the position of Director of Auxiliary Services is not comparable with the positions of assistant vice-president.

Ms. Hoffstetter cannot prevail on her salary claim.

OFFICE SPACE

Ms. Hoffstetter claims that she was discriminated against because of her sex in that she was assigned to office space

far less comfortable than that provided to the assistant vice-presidents. Ms. Hoffstetter testified that the assistant vice-presidents had large windowed, carpeted, private offices with adjacent secretarial areas. She explained that after she was appointed Director of Auxiliary Services, she shared a 12'x18' space next to the loading dock with three other women, including her secretary. (Tr. 6127).

Dr. McGill testified that in September, 1981, he expressed to Ms. Hoffstetter his desire to find new office space for her and the Director of Material Management which he intended to hire. He testified that space became available in the immediate area of the administrative offices of the university in the summer or fall of 1982 and that Ms. Hoffstetter was given a new,

carpeted office at that time. (Tr. 19,268).

In light of the court's finding that the position of Director of Auxiliary Services is not comparable to the positions of assistant vice-president, Ms. Hoffstetter cannot prevail on this claim. While the facts show that Ms. Hoffstetter's office space was not comparable to the assistant vice-presidents, there is no indication that the delay in assigning Ms. Hoffstetter new office space was because of her sex or that she received less favorable treatment than others in comparable positions. Furthermore, the evidence indicates that many faculty at OHSU have inadequate office space.

Ms. Hoffstetter cannot prevail on her office space claim.

STAFF MEETINGS

In her final claim of sex discrimination, Ms. Hoffstetter contends that because of her sex, she was not included in staff meetings attended by male administrators. Ms. Hoffstetter testified that Dr. McGill had staff meetings for those people directly responsible to him. She explained to the court that she was not invited to the "all-male staff meetings" (Tr. 6128) until Dr. Frances Storrs, a female medical doctor, complained to President Laster about both Ms. Hoffstetter's salary and the staff meetings. (Tr. 6128). Ms. Hoffstetter testified that as a result of the complaint she was able to attend staff meetings. (Tr.6129).

Dr. McGill testified that initially he met with the three assistant vice-presidents. He explained that these meetings were part of continual efforts

to put into place a management structure for OHSU that was going to resolve some of the serious administrative problems, particularly in light of the budget cuts OHSU was experiencing. Dr. McGill felt that the initial meetings with the three assistant vice-presidents were necessary to build the assistants as a team. (Tr.19,370). Dr. McGill maintained that as that team solidified, there came a time when he wanted to add people to the meetings. It was at that point that Ms. Hoffstetter, as Director of Auxiliary Services, was included, as well as others who reported directly to Dr. McGill. (Tr.19,371). Dr. McGill maintained that the letter of complaint regarding Ms. Hoffstetter sent to President Laster did not influence his decision to include Ms. Hoffstetter.

Apparently, Dr. McGill met in a group with the three assistant vice-presidents who reported to him, but met individually with the Directors of Auxiliary Services and Materials Management, who also reported to him. The three assistant vice-presidents had responsibilities for the institution's budget, the institution's facilities and security, and the institution's personnel and payroll. Ms. Hoffstetter was in charge of the institution's auxiliary services. This court cannot say that it was unreasonable that Dr. McGill chose to meet with the three assistant vice-presidents without inviting Ms. Hoffstetter to attend. Dr. McGill was a totally credible witness. The court is satisfied that sex discrimination had nothing to do with his decisions regarding staff meetings.

Ms. Hoffstetter cannot prevail on her staff meetings claim.

Ms. Hoffstetter Footnotes

1. In November, 1982, OHSU President Leonard Laster reorganized the administrative structure of the OHSU naming Dr. McGill as the only vice president and the chief operating officer. While Dr. McGill was thereafter responsible for all day-to-day operational matters, Dr. Laster made the policy decisions which Dr. McGill implemented.

2. Dr. McGill did not conduct searches before appointing Mr. Tuomi and Mr. Parelius. After consulting with the OHSU affirmative action officer, Dr. McGill decided that Mr. Tuomi and Mr. Parelius were not receiving new "jobs," but were basically performing their same jobs with some additional duties and new titles. As such, a search was not required.

DR. JANE SIEGEL

Dr. Jane Siegel, a research associate professor in the Division of Immunology, Allergy, and Rheumatology in the Department of Medicine at the Oregon Health Sciences University (OHSU), alleges that she was discriminated against on account of her sex in that (1) she was denied an affiliate appointment with the Department of Microbiology and Immunology in 1976; and (2) she has been consistently "placed on soft money, fixed-term appointments." Dr. Siegel intervened in this action as a named plaintiff without filing a charge of discrimination with the Equal Employment Opportunity Commission.

Dr. Siegel received a B.A. degree in zoology from Pomona College, Claremont, California, in 1952, and an M.A. degree in zoology from the University of

Wisconsin, Madison, Wisconsin, in 1954. She received a Ph.D. degree in experimental pathology and biochemistry from OHSU in 1976. Prior to coming to OHSU as a research associate, Dr. Siegel was a research assistant in the Department of Zoology and Biochemistry at the University of Wisconsin (two years); a project associate in the Department of Physiological Chemistry at the University of Wisconsin (four years); a fellow at the Norsk Hydros Institute for Cancer Research in Oslo, Norway (part of a year); and a research assistant in the Department of Biochemistry at the University of California (two years).

Dr. Siegel came to OHSU in 1964. From 1964 until 1967, she was a research associate without academic rank in the Department of Pathology at the OHSU. From 1967 to 1976, she was a research

associate without academic rank in the Division of Immunology, Allergy, and Rheumatology at the OHSU. In 1976, when Dr. Siegel received her Ph.D. degree, she applied for and received an appointment as an assistant professor, an academic rank in the Division of Immunology, Allergy, and Rheumatology. From 1976 to 1979 she was an Alpha Omicron Pi fellow of the Arthritis Foundation within the Division of Immunology, Allergy, and Rheumatology. She was promoted to associate professor in this Division in 1979.

Dr. Siegel has authored or coauthored 61 refereed articles in addition to 54 abstracts. She is a member of many scientific and professional organizations, including the American Association for Immunologists

and the American Association for Cancer Research.

DENIAL OF AFFILIATE APPOINTMENT

In 1976, as the time neared for the completion of her Ph.D. degree, Dr. Siegel applied for a position with academic status in the Division of Immunology, Allergy, and Rheumatology, where she had worked as a research associate for nine years. The Division of Immunology, Allergy, and Rheumatology is a part of the Department of Medicine. The Department of Medicine is a clinical department.

Within the School of Medicine there are two general types of departments: (1) clinical departments and (2) basic science departments. Both departments teach medical students. The basic science departments teach the first and second year medical students such basic

science classes as anatomy, physiology, and chemistry, and have responsibility for graduate teaching and the training of Ph.D. degree candidates. Clinical departments teach and train the third and fourth year medical students, interns, residents, and medical fellows in actual medical diagnosing and patient care. Dr. Siegel explained:

> For the most part, the clinical departments are populated by M.D.'s, and for the most part the basic sciences are populated by Ph.D.'s. But within each, there are also small subpopulations of the other group.

(Tr. 7,339).

In general, funds appropriated by the Legislative Assembly from state revenues for salaries and support funds are prioritized by OHSU for those with M.D. degrees teaching in clinical departments and for those with Ph.D.

degrees teaching in the basic science departments. Legislatively appropriated funds are known as "hard money." Since Dr. Siegel is a research person in a clinical department rather than a teacher in a basic science department, and since she has a Ph.D. degree rather than an M.D. degree, her salary and other monetary support comes from money generated by gifts, grants, and contracts. Money from gifts, grants, and contracts is known as "soft money."

It is preferable to have a position funded with hard money. A faculty member on soft money has to apply continually for gifts or grants or contracts, which takes time away from research and other creative and scholarly activities. The process of obtaining soft money is highly competitive and the success rate is low. When Dr. Siegel

received a position with academic rank in the Division of Immunology, Allergy, and Rheumatology, she did not have a financially secure position as a faculty member, and she knew it.

The head of the Division of Immunology, Allergy, and Rheumatology, Dr. Bernard Pirofsky, had explained to Dr. Siegel that because she had a Ph.D. degree rather than an M.D. degree and because her appointment was to a clinical department rather than a basic science department, hard money support for her salary was exceedingly limited. Dr. Pirofsky told her that her academic future depended upon obtaining a primary appointment in a basic science department and that her appointment in the Division of Immunology, Allergy, and Rheumatology was restricted in that she probably would never be able to obtain

either advancement, funding, or stability. Dr. Siegel does not claim any sex discrimination in her appointment or her funding with the Division of Immunology, Allergy, and Rheumatology. Dr. Siegel testified:

> [O]ne of the problems with a Ph.D. falling within the realm of a clinical department is that they are generally and categorically non-tenure track and on soft money, I think unrelated to sex.

(Tr. 7340).

Since Dr. Siegel knew that the Division of Immunology, Allergy, and Rheumatology would not accept responsibility for funding her salary, she applied for an "affiliate appointment"[1] with the Department of Microbiology and Immunology, which is a basic science department [as opposed to a clinical department] where those with Ph.D. degrees [as opposed to M.D.

degrees] teach the basic science classes to first and second year medical students and students working toward higher degrees in one of the basic sciences. This application for affiliate appointment to a basic sciences department, the Department of Microbiology and Immunology, was in conjunction with her assistant professor position in the clinical department.[2]

Dr. Siegel considered this application for an affiliate appointment as a "first step" to an eventual primary appointment in some basic science department. In addition, an affiliate appointment would allow Dr. Siegel to obtain graduate faculty status which is extremely important for professional advancement. Dr. Siegel testified as follows:

Q [By Ms. Abernethy] And the importance of graduate faculty status to you is the opportunity to teach graduate students; is that about the sum of it?

A It's the opportunity to teach graduate students and more importantly to train graduate students in a laboratory situation. And in fact have them as junior colleagues in carrying out your research program. Because in fact research is -- is very labor intensive and brain intensive. And these young students are smart and able and ambitious and hard working and I think most faculty members that are actively engaged in research depend to a very large extent on the assistance of these individuals.

So really the deprivation of these students has a major impact on one's own research career.

(Tr. 7,403-404).

Dr. Siegel was denied an affiliate appointment in the Department of Microbiology and Immunology. She claims the denial was because she is a woman.

The Board contends that Dr. Siegel's request for an affiliate appointment was denied because she had not shown sufficient interest in the activities of the Department of Microbiology and Immunology to indicate the possibility of collaboration in the Department's particular area of scholarship, and that Dr. Siegel's interest in experimental pathology and immunology did not fulfill a specific need of that Department. The Board also contends that Dr. Siegel's claim is time-barred. The court must address the last issue before it addresses the merits of Dr. Siegel's claim.

For the purposes of an intervenor-plaintiff, such as Dr. Siegel, who did not file charges with the EEOC or the Oregon Bureau of Labor, the court has previously ruled that this lawsuit

involves only those allegedly discriminatory actions occurring after July 21, 1979. See infra, Law Applicable to Named Plaintiffs' Claims p. 5. The decision to deny Dr. Siegel an affiliate appointment in the Department of Microbiology and Immunology in 1976 is a discrete act made at a particular point in time similar to a denial of tenure or a termination and does not constitute a continuing violation, such as a salary claim. The denial of Dr. Siegel's application for an affiliate appointment did not occur within the relevant time period. Therefore, the court need not address the merits of her claim, because she cannot prevail on this claim even if it is meritorious. It is time-barred.

SOFT MONEY/HARD MONEY

Dr. Siegel next contends that she has been discriminated against because

of her sex because she has been "placed" on soft money, fixed-term, non-tenurable appointments. The Board asserts that (1) Dr. Siegel's position continues to be funded by soft money and therefore is fixed-term and non-tenurable because hard money funding in her clinical division goes to support the salaries of those individuals (men or women) with M.D. degrees; and (2) Dr. Siegel was aware when she accepted her appointment in the Division of Immunology, Allergy, and Rheumatology that she would not be funded by hard money, and Dr. Siegel admitted that sex was not a factor in this process. (See infra, p.4 - Dr. Siegel).

In support of her individual claim, Dr. Siegel presented evidence that: (1) the per capita allocation of hard money to male faculty is approximately

$22,000, while the per capita allocation of hard money to female faculty is approximately $13,000, (Pl. Ex.1278); (2) 55% of female faculty at OHSU have their entire salaries paid by soft money, while only 20% of the male faculty have their entire salaries paid by soft money; (3) at the rank of full professor the average amount of hard money dollars received by women is $17,000, while the average amount of hard money dollars received by men is $31,000; (4) at the rank of associate professor, the average amount of hard money dollars received by women is $4,000, while the average amount of hard money dollars received by men is $19,000; (5) at the rank of assistant professor, the average amount of hard money dollars received by men and women is similar, that amount being somewhere between $9,000 and

$10,000, (Pl. Ex.30); (6) during the period from 1979 to 1981, 30% of women with Ph.D. degrees at the OHSU lost their soft money, fixed-term, non-tenured positions as the result of the loss of soft money; (Pl. Ex.850-a).

As addititional support for her individual claim that she has been discriminatorily "placed" on soft money, Dr. Siegel compares herself to four male immunologists with Ph.D. degrees who have hard money positions: (1) Dr. Wesley Bullock, School of Dentistry; (2) Dr. Charles Faust, a joint appointment in the Department of Biochemistry and in a clinical department; (3) Dr. Gerrie Lesley, Department of Microbiology and Immunology; and (4) Dr. Marvin Rittenburg, Department of Microbiology and Immunology. Dr. Siegel claims that these four men made the transition from

soft to hard money and as of 1981-82 were earning almost their entire salaries on a hard money, state budgeted basis. (See Pl. Ex.838, 839; Plaintiffs' Findings of Fact No.12).

Dr. Siegel's analysis of the per capita distribution of hard and soft money to faculty with Ph.D. degrees illustrates little about discrimination concerning Dr. Siegel herself. The validity of the evidence regarding the per capita distribution is questioned by the Board's testimony that at OHSU tenured faculty or faculty on tenure track are often supported by grant funds (soft money) at various times. For the years they receive grant funds, tenured or tenure track people are statistically identical to people like Dr. Siegel who are funded by grants, gifts, and contracts. While the court has

considered this general statistical evidence, the court's conclusion in Dr. Siegel's case rests on the particular facts of Dr. Siegel's employment.

Dr. Siegel admits that faculty with Ph.D. degrees who are in clinical departments generally hold fixed-term, non-tenurable contracts on soft money. The reason is not related to sex, but to the necessity for having faculty with M.D. degrees supervise the third and fourth year medical students. Dr. Siegel also acknowledges that faculty with Ph.D. degrees who are in basic science departments generally are on hard money. Dr. Leslie and Dr. Rittenburg have primary appointments in the Department of Microbiology and Immunology, a basic science department in the School of Medicine. Dr. Bullock has a primary appointment in the Department of

Microbiology and Immunology, a basic science department in the School of Dentistry. Dr. Faust has a joint appointment[3] in the Department of Biochemistry, a basic science department, and a clinical department. It follows that Dr. Leslie, Dr. Rittenburg, Dr. Bullock, and Dr. Faust would have hard money positions.

The only person with a Ph.D. degree who has a primary appointment in a clinical department and whose salary is funded by hard money is a woman. Dr. Siegel testified as follows:

> Q [By Ms. Abernethy] Do you know of any tenured Ph.D.'s or tenure track Ph.D.'s with a primary appointment in a clinical department?
>
> A Yes.
>
> Q Who?
>
> A Dr. Virginia Weimer.

(Tr. 7,392).

To the extent that Dr. Siegel's claim is that she did not receive a primary appointment in a basic science department, the evidence is uncontradicted that she did not apply for such a position. To the extent that Dr. Siegel's claim is that she did not receive a transfer[4] to a basic science department, Dr. Siegel did not apply for a transfer to a basic science department. To the extent that Dr. Siegel's claim is based upon the 1976 denial of her request for an affiliate appointment in the Department of Microbiology and Immunology, a basic science department, it is time-barred. To the extent that Dr. Siegel claims that within the relevant time period the Board engaged in further actions which prevented her from making the transition from soft to hard money funding, those actions are not

identified, and there is no evidence in the record to support such a claim.

Dr. Siegel was advised before she applied for and accepted a faculty position in the Division of Immunology, Allergy, and Rheumatology that she was responsible for generating the funding for her own salary and that the Division could not guarantee her salary. Her salary came from soft money because she held a Ph.D. degree in a clinical department where the M.D. degree reigns supreme.

Dr. Siegel cannot prevail on her soft money/hard money claim.

INTRODUCTION TO THE CLASS CLAIM

In addition to their 22 individual claims, the plaintiffs have also alleged that the Board has engaged in a pattern or practice of treating female faculty members less well than male faculty members because of their sex. While the law gives substantial guidance to trial courts on how to analyze and decide individual disparate treatment claims, the law is less clear as to precisely what kind of proof is sufficient to show a patter nor practice of discrimination against an entire class. Moreover, the method of proving a pattern or practice class action differs from that of individual cases.

The label "pattern or practice" which has been applied to class actions under Title VII comes from language in 42

U.S.C.[2C]2000e-6(a), which provides:

> "Whenever the Attorney General has reasonable cause to believe that any person or group of persons is engaged in a pattern or practice of resistance to the full enjoyment of any of the rights secured by this subchapter, and that the pattern or practice is of such a nature and is intended to deny the full exercise of the rights herein described, the Attorney General may bring a civil action in the appropriate district court of the United States by filing with it a complaint (1) signed by him (or in his absence the Acting Attorney General), (2) setting forth facts pertaining to such pattern or practice, and (3) requesting such relief including an application for a permanent or temporary injunction, restraining order or other order against the person or persons responsible for such pattern or practice, as he deems necessary to insure the full enjoyment of the rights herein described. (Emphasis added).

Although this statute does not provide explicitly for a private right to file a pattern or practice class action, the

Supreme Court has indicated that private citizens have the right to file pattern or practice class actions, See, Franks v. Bowman Transportation Co., 424 U.S. 747 (1976), and that the same rules of law concerning evidentiary proofs shall apply in both private and government actions. International Brotherhood of Teamsters v. United States, 431 U.S. 324, 358-60 (1977).[1] The Teamsters case sets out the framework for proving and analyzing pattern or practice class actions such as this one.

Teamsters involves a claim that a trucking company practiced systemwide discrimination against black people and people with Spanish surnames with respect to hiring, assignment, and promotion, and in particular that the trucking company discriminated against black people and people with Spanish

surnames by giving higher paying, more desirable line-driver and long-haul positions to white people. In Teamsters, the Court discussed both (1) the manner in which pattern or practice cases should be proved and (2) the effect of a finding of pattern or practice liability on the ability of an individual employee to obtain relief.

As to the method of proof in pattern or practice cases, the Court began by noting:

> "The government's theory of discrimination was simply that the company . . . regularly and purposefully treated Negroes and Spanish-surnamed Americans less favorably than white persons. . . . The ultimate factual issues are thus simply whether there was a pattern or practice of such disparate treatment and, if so, whether the differences were "racially premised." [citation omitted].

431 U.S. at 335. Both the language of

section 2000e-6(a) and the language quoted above indicate the need for a plaintiff to prove that the pattern or practice of disparate treatment was purposeful or intentional. In order to prove the pattern or practice case,

> "[t]he Government bore the initial burden of making out a prima facie case of discrimination. [Citations omitted]. And, because it alleged a systemwide pattern or practice of resistance to the full enjoyment of Title VII rights, the Government ultimately had to prove more than the mere occurrence of isolated or "accidental" or sporadic discriminatory acts. It had to establish by a preponderance of the evidence that racial discrimination was the company's standard operating procedure--the regular rather than the unusual practice."

Id. at 336 (footnote omitted) (emphasis added). In support of its case, the government offered statistical evidence showing that a mere handful of black

people and people with Spanish surnames were in line-driver positions, and that the great majority held the lower paying, less desirable positions. Added to the statistical proof was anecdotal testimony of specific instances of discrimination:

> The Government bolstered its statistical evidence with the testimony of individuals who recounted over 40 specific instances of discrimination. Upon the basis of this testimony the District Court found that "[n]umerous qualified black and Spanish-surnamed American applicants who sought line-driving jobs at the company over the years, either had their requests ignored, were given false or misleading information about requirements, opportunities, and application procedures, or were not considered and hired on the same basis that whites were considered and hired." Minority employees who wanted to transfer to line-driver jobs met with similar difficulties.[19]

Footnote 19 states:

Two examples are illustrative:

> George Taylor, a Negro, worked for the company as a city driver in Los Angeles, beginning late in 1966. In 1968, after hearing that a white city driver had transferred to a line-driver job, he told the terminal manager that he also would like to consider line driving. The manager replied that there would be "a lot of problems on the road . . . with different people. Caucasian, et cetera," and stated: "I don't feel that the company is ready for this right now. . . . Give us a little time. It will come around, you know." Mr.Taylor made similar requests some months later and got similar responses. He was never offered a line- driving job or an application.
>
> Feliberto Trujillo worked as a dockman at the company's Denver terminal. When he applied for a line-driver job in 1967, he was told by a personnel officer that he had one strike against him. He asked what that was and was told: "You're a Chicano, and as far as we know, there isn't a Chicano driver in the system."

Id. at 338. These illustrative examples

involve situations where evidence of intent to discriminate because of race is readily apparent. Hence, these examples bolstered the inference of discrimination created by statistics, and made it easier for the Teamsters Court to conclude that a pattern or practice of purposeful racially-premised discrimination had been proved. However, the Court hinted in Teamsters, 431 U.S. at 399, and explicitly stated in a later case that "[w]here gross statistical disparities can be shown, they alone may in a proper case constitute prima facie proof of a pattern or practice of discrimination." Hazelwood School District v. United States, 433 U.S. 299, 307-08 (1977).

Once a plaintiff in a pattern or practice case has made a prima facie showing,

"[t]he burden then shifts

> to the employer to defeat the prima facie showing of a pattern or practice by demonstrating that the [plaintiff's] proof is either inaccurate or insignificant. An employer might show, for example, that the claimed discriminatory pattern is a product of pre-Act hiring rather than unlawful post-Act discrimination, or that during the period it is alleged to have pursued a discriminatory policy, it made too few employment decisions to justify the inference that it engaged in a regular practice of discrimination.

Teamsters, 431 U.S. at 360 (footnote omitted). The employer's defense must "be designed to meet the prima facie case of the [plaintiff]"; the employer has the burden "to provide a non discriminatory explanation for the apparently discriminatory result." Id. at 361, n. 46. The burden shifts to the employer at this point because

> "[a statistical] imbalance is often a telltale sign of purposeful discrimination;

> absent explanation, it is ordinarily to be expected that nondiscriminatory hiring practices will in time result in a work force more or less representative of the racial and ethnic composition of the population in the community from which employees are hired. (Emphasis added).

Id. at 339 n. 20. The Court again uses the word "purposeful"; statistically disparate results are alone insufficient unless they can support an inference of purposeful discrimination.

If a plaintiff in a pattern or practice case makes a showing that an employer has engaged in a pattern or practice of discrimination, the court may award prospective relief, such as injunctive relief; may require the employer to adopt an affirmative action plan; or may require that the employer keep records of its employment decisions and report to the court. Id. at 361.

In the initial "liability" stage of a pattern or practice suit, however, "the [plaintiff] is not required to offer evidence that each person for whom it will ultimately seek relief was a victim of the employer's discriminatory policy." Id. at 360. Rather, matters of individual remedy are to be taken up at a second stage of trial. The fact that an employer may in general practice illegal discrimination does not necessarily mean that every protected employee has suffered damage from the practice.

The second stage of trial, the "remedial" or "damage" stage, involves such individual determinations. However, unlike an individual disparate treatment action, where the plaintiff carries the ultimate burden of persuasion, in the remedial stage of a pattern or practice

case, the burden is on the employer to show that individual class members were not the victims of discrimination.

> By "demonstrating the existence of a discriminatory hiring pattern and practice" the plaintiffs had made out a prima facie case of discrimination against the individual class members; the burden therefore shifted to the employer "to prove that individuals who reapply were not in fact victims of previous hiring discrimination."

Id. at 359, quoting Franks, 424 U.S. at 772. The burden is on the employer because "proof of the pattern or practice supports an inference that any particular employment decision . . . was made in pursuit of that policy." Id. at 362.

In this class action claim, plaintiffs bear the burden of proving that the Oregon State Board of Higher Education has engaged in a pattern or

practice of intentionally treating female faculty less well than male faculty because of their sex. Plaintiffs may only prevail by establishing that sexual discrimination is the Board's "standard operating procedure -- the regular rather than the unusual practice." Id. at 336. Plaintiffs' statistical evidence is the foundation for this claim, although the court will also evaluate other evidence presented as it may bolster or detract from the statistical evidence. Plaintiffs' statistical evidence must show a sufficient disparity between the treatment of male and female faculty members from which the court can conclude (1)that differences in treatment of male and female faculty members are the "regular rather than the unusual practice" of the Board and (2)that these differences result from a discriminatory

motive. "Proof of discriminatory motive is critical, although it can in some instances be inferred from the mere fact of differences in treatment." Id. at 335 n 15.

The course that the court will follow in regard to the class action claim will be to evaluate the statistical evidence before it, keeping in mind the court's rulings in the named plaintiffs' cases, as well as the other evidence. Then the court will determine the ultimate factual issue in the class action claim: Whether plaintiffs have "establish[ed] by a preponderance of the evidence that [sexual] discrimination was [the Board's] standard operating procedure -- the regular rather than the unusual practice." Id. at 336.

INTRODUCTION - CLASS CLAIM FOOTNOTE

1. One crucial difference between private rights and governmental rights remains, however: In an action brought by the government, compliance with the requirements of Fed. R. Civ. P.23, governing class actions, need not be shown. General Telephone Company of the Northwest v. EEOC, 446 U.S. 318 (1980). Private litigants must, however, show compliance with Rule 23; compliance is not presumed or waived as in the case of a government action. General Telephone Company of the Southwest v. Falcon, 457 U.S. 147 (1982).

COURT'S EVALUATION OF THE STATISTICAL EXPERTS

The class action portion of this case is based primarily on statistical evidence. The statistical evidence upon which the court must rely in resolving the class action issues was presented by expert witnesses retained by the parties. To a great extent, these expert witnesses have had to educate the court in the application and use of statistics in Title VII cases, and, in general, the court must rely on one set of experts or the other in areas in which they disagree. When experts disagree, a court must also rely upon its own notions of the soundness and logic of their various positions. In determining upon which set of experts to rely, the court must also evaluate and consider the backgrounds, credibility, and biases of the expert

witnesses in weighing their testimony. Plaintiffs' primary expert witnesses are Dr. Mary Gray, Dr. Fred Ramsey, and Dr. Barbara Bergmann.

Dr. Gray is a professor of mathematics, statistics, and computer science at American University in Washington, D.C. She has published a number of articles dealing with statistics and employment discrimination, including some involving institutions of higher education. She is or has been President of the Women's Equity Action League, which has partially funded the present case and is or has been active in the American Association of University Professors, a college teachers union. She has participated in a number of employment discrimination cases, primarily on behalf of plaintiffs; however, she has not previously

testified as an expert on statistical matters.

Dr. Fred Ramsey is an associate professor of statistics at Oregon State University. Dr. Ramsey's professional experience has been primarily in the area of the application of statistics to the field of biology. Except for one other sex discrimination case, he has had no experience in the application of statistics to employment discrimination cases.

Dr. Barbara Bergmann is a professor of economics at the University of Maryland. She has published a number of articles involving employment discrimination and the application of statistics to employment discrimination cases. She has testified as an expert in a number of other cases, all on behalf

of plaintiffs or the Equal Employment Opportunity Commission.

The Board's leading expert is Dr. Bernard Siskin, a former professor of statistics at Temple University. He is pres ently the senior research statistician at the Center for Forensic Economic Studies in Philadelphia, Pennsylvania. He is one of the nation's leading experts on the application of sta tistics to Title VII cases. He has published widely in the area. He has testified as an expert witness in some 50 cases, and has participated to some degree in approximately 200 cases. A number of these cases have involved institutions of higher education as defendants. Dr. Siskin has been retained by plaintiffs 60 to 70 percent of the time.

Dr. Joan Haworth, another of the

Board's experts, is an associate professor of economics at Florida State University. She has done substantial research and publication in the area of economics, statistics, and employment discrimination. She has testified as an expert in twelve employment discrimination cases and consulted in 20 more, including a number involving institutions of higher education. In five or six of these cases, Dr. Haworth was retained on behalf of plaintiffs.

Dr. Finis Welch, also retained by the Board, is a professor of economics at the University of California Los Angeles and the president of a consulting firm specializing in economics and statistics. He has also published in this area, and has testified as an expert in a number of cases.

Dr. Paul Meier is a professor of

statistics at the University of Chicago. He has testified in employment discrimination cases, including several involving higher education. He has consulted in several others on behalf of plaintiffs.

The Board's experts, unlike plaintiffs' experts, show no pattern of having previously testified primarily for either plaintiffs or defendants in employment discrimination cases. Because the Board's experts have testified for both employers and employees in such cases and because, as nationally recognized experts, they may be expected to do so in the future, they have personal and economic, as well as legal and ethical reasons not to "stretch" statistical or economic theory in their testimony solely to benefit this particular defendant in this particular

case. Although plaintiffs brought out the size of the fees paid to the Board's experts, in order for these experts to continue to generate such fees, they must maintain their credibility. In fact, the Board's experts have been and are currently aligned against one another in other employment discrimination cases. In contrast, plaintiffs' experts are either individuals such as Dr. Ramsey who are unlikely to testify in other sex discrimination cases or individuals who have consistently testified only for plaintiffs.

Another important consideration for the court in weighing and judging the credibility of the expert witnesses is the directness and forthrightness with which they responded to questions put to them on cross-examination. Of

plaintiffs' experts, only Dr. Ramsey consistently gave direct and straightforward responses to questions put to him by the Board, conceding points he believed valid, despite the consequences to his cause. In contrast, Drs.Gray and Bergmann often appeared openly partisan and argumentative in their responses to the Board's questions. The Board's experts were reasonable and forthright. On the whole, the court finds the Board's statistical experts to be more qualified, more credible, and less biased in favor of their party's position than plaintiffs' experts.

EVALUATION OF STATISTICAL EVIDENCE IN SUPPORT OF CLASS CLAIM

Plaintiffs claim that their statistical evidence proves that women faculty members are intentionally treated less favorably by the Board because of their sex than men faculty members with respect to salary, promotion and rank, tenure, and advancement to administrative positions. Because the statistical evidence is crucial, the court will begin its analysis of that evidence with a general discussion of the function, nature, and limitations of statistical evidence in Title VII actions.

Plaintiffs' cause of action is a disparate treatment cause of action. In order to prevail, plaintiffs must prove not only that they were treated differently from men, but that the Board had a discriminatory motive, intent, or

animus in treating them differently. See Texas Department of Community Affairs v. Burdine, 450 U.S. at 253; International Brotherhood of Teamsters v. United States, 431 U.S. at 335 n. 15. Discriminatory motive, intent, or animus may be inferred from differences in treatment, however. The function of statistical evidence is to provide circumstantial evidence from which the court may draw an inference of discriminatory motive, intent, or animus. Spaulding v. University of Washington, 740 F.2d 686, 703-04 (9th Cir. 1984). This court must (1) examine the reliability and validity of the statistical evidence and (2) determine the extent to which that statistical evidence is probative or relevant, given the other factual evidence in the case. As the Ninth Circuit recently warned:

Granting that statistics "when properly authenticated, constitute an accepted form of circumstantial evidence of discrimination," EEOC v. Federal Reserve Bank of Richmond, 698 F.2d 633, 645 (4th Cir. 1983), we are still sobered by warnings that statistical evidence has an "inherently slippery nature," Wilkins v. University of Houston, 654 F.2d 388, 395 (5th Cir. 1981), vacated and remanded, 459 U.S. 809, 103 S.Ct. 34, 74 L.Ed.2d 47 (1982), aff'd on remand, 695 F.2d 134 (5th Cir. 1983), and "can be exaggerated, oversimplified, or distorted to create support for a position that is not otherwise supported by the evidence." Note, Judicial Refinement of Statistical Evidence in Title VII Cases, 13 Conn.L.Rev. 515, 525 (1981). Thus, the weight of statistical proof relies implicitly on "the existence of proper supportive facts and the absence of variables which would undermine the reasonableness of the inference of discrimination." White v. City of San Diego, 605 F.2d at 460, quoting United States v. Ironworkers Local 86, 443 F.2d 544, 551 (9th Cir. [1971]), cert. denied, 404 U.S. 984, 92 S.Ct. 447, 30 L.Ed.2d 367 (1971).

Id. at 703.

Statistical evidence necessarily ignores the peculiar, particular facts of individual cases. Statistical evidence is simply the overall effect of individual cases viewed in the aggregate. Because statistical evidence may both illuminate and distort reality, a court relying on such evidence must constantly look from the statistics to the factual realities in order to gauge the probative value of the statistics.

Distortion rather than illumination may occur in two instances. First, distortion may occur in the mechanical operation of the statistical model used. Such distortion may be of a highly technical nature, particularly when sophisticated techniques, such as multiple regression, are used. Second, distortion may occur if the multiple

regression model assumes, or those relying on the model assume, facts which are not supported by the evidence. The most probative statistical evidence will use models contoured to fit factual realities. To the extent that statistical models include erroneous factual assumptions, their probative value is lessened.

The simplest of the statistical analyses done in this case are straightforward comparisons of the average salary, average tenure status, and average rank of men and women in the Oregon State System of Higher Education. These studies show substantial differences in the average salary, the average tenure status, and the average rank of men and women. The court cannot tell, however, from this information alone, whether differences in treatment

between men and women are because of sex discrimination, because of differences in relevant job qualifications, or because of differences in the jobs actually performed.[1]

In order to prevail plaintiffs must prove that even after all relevant qualifications are taken into account, there still remains a difference in the salary, rank, and tenure status of women, from which the court may infer sex discrimination. There are two basic methods plaintiffs can use to prove this difference: (1) matching studies, and (2) regression analyses. In matching studies, male-female pairs in which both individuals match closely with respect to certain employment qualifications thought or known to influence salary, rank, and tenure status are studied to determine whether men and women are

treated equally on the average. A more sophisticated and complex statistical method is known as regression analysis. A regression analysis attempts algebraically to determine the average effect of a given employment qualification on the employment outcomes of an entire group. Hence, regression analyses are used to account for differences in average qualifications between men and women not by matching pairs of actual individuals who have the same qualifications, but rather by mathematical manipulation. Both methods have strong and weak points. Matching techniques are more easily understood, but they usually result in an analysis of only a portion of the targeted population because no matches exist for some individuals. Regression analysis allows for a study of an entire population, but

the method is very complex and may produce misleading results if appropriate variables are omitted from, or inappropriate variables are added to, the regression analysis.[2]

Determining the variables that should be used in a regression analysis first requires an examination of what is to be studied by the regression analysis. In the present case, the salary, rank, and tenure status of men on the average and of women on the average in the Oregon State System of Higher Education is to be studied. In order to decide whether sex is a factor in the salary, rank, and tenure status of men on the average and of women on the average, it is necessary to control for as many as possible of those factors that are known from other evidence to influence salary, rank, or tenure status. In other

words, a regression analysis model upon which a court may rely to infer sex discrimination must include as explanatory variables those things known to influence salary, rank, or tenure status. This is important because the effect of a relevant explanatory variable which is omitted from the model but is associated with some variable that is in the model, will show up in the coefficient of the variable that is in the model.[3] For example, plaintiffs' "raw average" difference between male and female salaries can be thought of as the sex coefficient of a regression model with sex as the sole independent, explanatory variable. This "sex coefficient" is higher in this model containing no other explanatory variables precisely because the omitted variables relate to sex -- e.g., women have fewer

Ph.D.s than men, fewer years of experience than men, and so on. Hence, any omitted variable associated with sex will impact the sex coefficient. The first issue, then, that the court must determine is the propriety of the explanatory variables used by the plaintiffs in their regression models. In their first report (Ex. 1) plaintiffs use the following factors as explanatory variables:

Age at hire[4]

Years of service[5]

Whether the individual had obtained a Ph.D.

Years since receipt of highest degree

Ethnic origin

Whether the individual's highest degree was obtained after hire

Discipline (in "Model 2")

In their rebuttal report (Ex. 2782), plaintiffs use:

Age at hire

Years of service

Level of highest degree obtained (B.A., M.A., or Ph.D.)

Years since receipt of highest degree[7]

Whether the individual's highest degree was obtained after hire

Discipline (in "Model 2")

Plaintiffs contend that the variables they have used are appropriate proxies or substitutes for education and experience, factors that do, in fact, enter into pay, promotion, and tenure decisions. The Board contends that (1) plaintiffs' variables are inaccurate and

inappropriate substitutes for actual relevant prior experience and education, which are the factors plaintiffs are trying to measure; (2) plaintiffs' variables are faulty because they do not take into account the quality of prior education and experience; and (3) certain of plaintiffs' variables overstate the actual qualifications of women as compared to men.

Biases in the Variables in Plaintiffs' Model

As to the variables (1)years since receipt of highest degree; (2)age at hire (years since birth at hire); and (3)years of service (years since first hire); the court finds that these variables do not measure actual relevant experience as they purport to do.[8] They measure only potential relevant experience. For example, plaintiffs'

regression models treat as equal two individuals who received Ph.D.'s in 1960 (years since receipt of highest degree) even though one individual may have been out of the work force for some or all of the period since 1960. Similarly, plaintiffs' regression models also treat as equal two individuals hired in the same year, even though one may have worked part time and the other full time.

The variable "age at hire" suffers from similar flaws. This criticism is particularly important here, as the evidence shows that women tend to work fewer hours per year than men, that women are apt to take more time away from their jobs than men, and that women are more likely to work part time than men. See Testimony of Dr. George Johnson, Tr. 23,740-41; Ex. 2157, Ahern & Scott,

Career Outcomes in a Matched Sample of Men and Women Ph.D.'s, Tables 1.9 and 1.10 at 10 (1981); Ex. 2, Table A1; Testimony of Dr. Fred Ramsey, Tr. 1930. By failing to account for this, plaintiffs' regression models tend to overstate the relevant qualifications of women as compared to men. That is, given a group of male faculty and a group of female faculty possessing the same average years since degree, age at hire, and years of service as defined in the regression models, the male group will in fact have more actual, relevant experience than the female group. Because the male group has more actual, relevant experience, it is to be expected that the average salary, rank, and tenure status of the male group will be higher than the female group. Yet the regression models will attribute the

higher salary, rank, and tenure status of the male group to sex discrimination because, according to plaintiffs' model, the two groups are equally qualified. Hence, plaintiffs' "years since" variables are inherently biased and will result in the appearance of sex discrimination even though none is actually present.

The "years of service" variable is also biased because it ignores the practice of hiring senior faculty from outside the system into the higher ranks. If two equally qualified individuals, one man and one woman, obtain Ph.D.'s in 1965, and the woman begins her career in the Oregon State system in 1965 and the man begins his career elsewhere and then comes to the Oregon State system in 1980, plaintiffs' model will show disparate treatment of

the woman even if both the man and the woman are at the same salary, with the same rank and the same tenure status. The reason is that the woman has more "years of service" under plaintiffs' model. Because senior faculty hired at the upper ranks are predominantly men,[9] the "years of service" variable is biased in a manner systematically related to sex. This will tend to generate a larger negative sex coefficient[10] in the regression analysis model even where no discrimination exists. To compute a figure for "actual years of relevant experience" for each individual in the Oregon State system would be a monumental task. Nonetheless, the court concludes that these variables are biased to some extent, that the bias is related to sex, and that the bias has led the regression analysis models to generate an appearance

of sex-based differences in treatment, even though such differences may not in fact exist.

The Effect of Variables Excluded from Plaintiffs' Models

The Board's next criticism of plaintiffs' regression analyses is that certain variables have been left out of the regression analysis models that should have been included.

One area of criticism relates to the treatment of full-time and part-time employees in plaintiffs' regression analysis models. The salary figures used by plaintiffs control for the fact that some faculty are on nine-month salaries and some are on twelve-month salaries by multiplying twelve-month salaries by 9/11 -- a standard procedure used by the Board itself. The salary figures are also adjusted for differences

in "full-time equivalent" (FTE) level. As noted earlier, the FTE of an academic position in the Oregon system represents the extent to which the position is full- or part-time. A position with an FTE of .75 is thus a "three-quarter-time" position. The salary figures used by plaintiffs control for FTE differences; for example, a faculty member earning $15,000 per year in a .75 FTE position would have in plaintiffs' model a salary level equal to a faculty member earning $20,000 in a 1.0 FTE position. However, there is no control in plaintiffs' models for the fact that part-time faculty members are generally paid less per FTE unit than are full-time faculty members doing the same work. That is, a faculty member working at .75 FTE in a position that would bring $20,000 per year if it were a 1.0 FTE

position will generally make less than the salary of $15,000 computed by multiplying the full-time salary times the FTE level. Because more women than men tend to be part-time,[11] the result of failing to control for this factor will be a negative effect on the sex coefficient in plaintiffs' models. This means that the models will indicate a sex-based difference in treatment adverse to women even if no discrimination is actually present.[12]

The Board's second criticism is that plaintiffs' studies are devoid of any variables relating to the quality of prior experience, prior education, or present productivity or academic merit. The Board argues that in an academic setting, inclusion of some measure of quality is necessary for any statistical

analysis to be probative. Plaintiffs' response to this criticism is essentially three-fold: (1)most quality factors are not subject to quantification and hence cannot be used in statistical models; (2)most evaluations of productivity or merit are made by the very decision-makers against whom plaintiffs allege discrimination, and therefore, even if quality and productivity factors could be quantified, they would be "tainted" variables; and (3)there is no showing that the quality of women's experience, education, or academic merit is on the average any lower than that of men.[13]

The anecdotal evidence is overwhelming that factors such as research quantity and quality, teaching and administrative skills, and service to the institution and to the community

are extremely important and often determinative factors in individual decisions involving pay, promotion, and tenure. In presenting individual cases, both plaintiffs and the Board rely on evidence of the quality of the individual's prior education, prior experience, and present academic merit. It is undisputed that at all of the institutions of higher education considerations of quality are factors entering into employment decisions. The court rejects the position announced by plaintiffs at pages 116-17 of their rebuttal report:

> [The Board] suggests that plaintiffs use education, experience and discipline in an attempt to approximate some true qualifications variables. This is not the case, however. Plaintiffs use the education, experience and discipline as predictor variables because we

> believe that persons having the same degrees, the same years of experience and the same discipline should receive comparable salaries, unless it can be shown objectively that the performances differ. Plaintiffs are not attempting to model the process in which the administrators in OSSHE determine the "qualifications" of an individual. That determination within the OSSHE is highly subjective and unequal in its impact on women.

Title VII does not prohibit colleges and universities from considering non-quantifiable, subjective differences in the quality of faculty members' backgrounds and work experiences -- both past and present -- in making employment decisions. The Ninth Circuit in Spaulding made clear that the use of subjective criteria in decision making is not ordinarily subject to a disparate impact attack. See Spaulding, 740 F.2d at 709. Spaulding indicates that in a

disparate treatment action, use of statistics that fail "to control for exactly those differences between individuals that can legitimately lead to their being treated differently" are suspect. Id. at 704.

This court finds that the use of subjective evaluations of the quality and quantity of faculty members' academic merit by decision-makers in the Oregon State System of Higher Education is permissible and necessary under Title VII. Ordinarily, the subjective nature of employment decision-making in most employment situations requires a higher level of judicial scrutiny. However, in academic and professional employment situations, courts should be reluctant to second-guess subjective decisions made by employers or to impose the court's evaluation of the quality or merit of

academic and professional employees on defendants. See, e.g., Zahorik v. Cornell University, 729 F.2d 85 (2nd Cir. 1984); Faro v. New York University, 502 F.2d 1229 (2nd Cir. 1974); Green v. Board of Regents, 474 F.2d 594 (5th Cir. 1973); see generally 2 A. Larsen & L. Larsen, Employment Discrimination [2C][2C]50.70 et seq. (1983); but see Powell v. Syracuse University, 580 F.2d 1150 (2nd Cir. 1978), cert. denied 439 U.S. 984 (1978).

In certain jobs, only quantifiable and objective minimum qualifications are required, and job performance can also be measured by quantifiable and objective means. In these situations, the employer's "subjective" opinions of an applicant will not be job-related -- for example, whether a supervisor likes an employee's appearance and demeanor. In

such situations subjective opinions may lead to sexual and racial discrimination. In contrast, the subjective evaluations of decision-makers in academia are closely job-related: the subjective evaluations of academic merit made by one's peers define one's standing in the academic community. This is not to say that racial or sexual discrimination cannot infiltrate the subjective decision-making processes in academia. But to prove a violation of Title VII, plaintiffs must do so within the context of the processes used by the Board to make employment decisions. Title VII does not require colleges and universities to adopt or to abandon any particular decision-making practices. Title VII only requires that the practices be applied without regard to sex.[14] Hence, in order to prevail,

plaintiffs must present statistical evidence that models the decision-making processes under study. The absence of any control for quality in plaintiffs' statistics is not of itself fatal, but is an obvious weakness in the studies.[15] Certain factors indicative of quality that are outside the control of the Board and hence not subject to "taint" could have been included in plaintiffs' regression analyses -- for example, quality of degree granting institution or prior rank. The main dispute between the parties regarding quality or academic merit relates to rank as a variable; this dispute and its resolution is discussed in the section on rank.

The Board also criticizes plaintiffs' method of controlling for the highest degree obtained. In plaintiffs' first report, plaintiffs

used as the highest degree obtained variable whether or not a faculty member had obtained a Ph.D. degree. This method is deficient in several respects. First, the model treats as equal all faculty without Ph.D. degrees. In plaintiffs' model a faculty member with a B.A. degree is considered to have as much education as one with an M.A. degree. Second, plaintiffs' model fails to account for the fact that in certain disciplines degrees other than the Ph.D. degree are considered terminal. A terminal degree is the degree treated by a discipline as the highest degree ordinarily obtained. For example, a Doctor of Jurisprudence (J.D.) degree may be considered a terminal degree in law; a Master of Fine Arts (M.F.A.) degree may be considered a terminal degree in art. Plaintiffs' first model treats as equal

a J.D. degree, an M.F.A. degree, and a B.A. degree. The evidence indicates that the receipt of a terminal degree is very important in determining salary, rank, and tenure status. Plaintiffs' model also does not take into account multiple degrees, although the anecdotal evidence indicates that at least in some instances this is an important factor in employment decisions. Thus, plaintiffs' first model does not completely and accurately control for the highest degree. In contrast, the Board's regression models use as a highest degree variable whether someone has obtained a degree considered terminal in his or her field.

In contrast to plaintiffs' first report, plaintiffs' rebuttal report refines the highest degree variable somewhat, by allowing for three levels

of highest degree, Ph.D., M.A., and B.A. However, plaintiffs' rebuttal report contains no measure of terminal degrees which are not Ph.D. degrees, such as the M.F.A. degree. Finally, plaintiffs' highest degree variable does not take into account the quality and reputation of the institution from which the degree was obtained, even though this variable is not under the control of the Board, and even though this variable is most certainly a factor in the initial salary of newly hired faculty.

Technical Criticisms of Plaintiffs' Regression Analyses

The Board also criticizes the technical and mechanical aspects of regression analysis models in general. The regression analysis procedure is an algebraic process that rests upon certain structural assumptions for its validity.

When these assumptions are not met, the results of the regression analyses may be invalid and misleading. See D. Baldus & J. Cole, Statistical Proof of Discrimination [2C]8A.2 at 76 (1980). Although technical in nature and difficult to grasp, an understanding of these structural assumptions and an appreciation of the possible misleading results if the assumptions are not met are critical elements in the evaluation of the probative value of regression analyses.

The first problem involves what is known as "interaction." Regression analysis is an averaging technique. The regression analysis model produces coefficients representing the average value or weight attached to an explanatory variable over the entire population under study. For example, if

a regression analysis model produces a coefficient of $250 for the "years of service" variable, this means that on the average for the population under study, each additional year of service results in a $250 raise in salary. It is possible, however, that the weight or value placed on an explanatory variable is systematically related to another variable in the model. For example, it might be that each additional year of service is valued more highly for individuals without terminal degrees than for individuals with terminal degrees. Or, more realistically, it may be that in different academic departments different explanatory variables are rewarded differently. For example, a terminal degree may be more important in a department that stresses research, while a year of service might be more

important in a department that stresses teaching.[16] If such situations occur, then one structural assumption of the regression analysis model -- the "additivity assumption"[17] -- is not met. In such situations, the variables are said to "interact"; that is, one explanatory variable (e.g., department) has an effect on the values of other explanatory variables. Depending on the distribution of men and women over the various explanatory variables, the effect of failing to account for this interaction may produce a negative sex coefficient even if there is no discrimination against women.[18]

There are two ways to account for the interaction possibility. One method is to do separate regression analyses for each value of the variable thought to affect the value of other variables.

For example, if discipline or department is thought to influence the value of other variables, then individual regression analyses could be run for each discipline or department. A second method is to include as variables in the model "interaction terms," which account for the interactive effect of some variables. See Baldus & Cole, supra, at 278.

In the present case, the primary focus is on the interactive effect of discipline or department. The Board contends that plaintiffs' regression analyses are flawed because they fail to take into account the fact that different departments value different qualifications in different ways. To counter this objection, plaintiffs did limited studies to see whether in fact discipline or department was interactive,

and, if so, if failing to account for the interaction made the sex coefficients in plaintiffs' regression analyses more negative.

Plaintiffs first did a department-by-department regression analysis for the University of Oregon (U of O) for the 1979-80 academic year. The results of this study, (Table 15 of Ex. 2782) confirmed that the department variable was substantially interactive; that is, the coefficients for the other explanatory variables varied widely in different departments. More significantly, there was a wide variety in the value of the sex coefficients in the various departments. But most importantly, the aggregate sex coefficient for the U of O was approximately 30 percent less than the sex coefficient for the institution in

plaintiffs' equivalent regression analysis models that did not account for interaction. This tends to confirm the validity of the Board's criticism: Failure to account for interaction by discipline or department makes sex coefficients more negative.

Plaintiffs next did a regression analysis using interaction terms as variables, which allowed for estimates of the effect of the other explanatory variables to vary by groupings of related departments. The results of this analysis (Table 16 of Ex. 2782) again confirm the Board's criticism: At every institution except Oregon Institute of Technology and Oregon Health Sciences University, allowing for the interactive effect of discipline made the sex coefficient less negative. The reduction was 43 percent at Oregon State

University, 22 percent at Western Oregon State College, and 14 percent at the University of Oregon.

The conclusion to be drawn from these studies is clear -- the sex coefficients in plaintiffs' regression studies that do not account for the interactive effect of discipline or department are substantially more negative than if interaction is taken into account. No studies were done to test the effect of the interaction of discipline or department on the rank and tenure regressions. However, given the magnitude of the changes in the sex coefficients in the salary regression analyses when depart mental interaction is accounted for, as well as the results of Dr. Siskin's promotion and tenure studies (which were done on a department-by-department basis), the

court concludes that the sex coefficients in the rank and tenure studies may also be more negative as a result of the failure to account for the interactive effect of department. The court cannot determine if other variables in plaintiffs' model besides discipline or department have an interactive effect. But the failure to account for interaction is a serious and substantial flaw in plaintiffs' regression analysis models.

A second assumption made by a regression analysis model is "that a one unit change in [an explanatory] variable will always produce the same effect on the [variable to be explained], such as salary, regardless of the point on the scale for the [explanatory] variable at which the change occurred." Baldus & Cole, supra, at 276. An example of this

"straight-line assumption" involves the variable "years of service". If, in fact, an employee's twentieth year of service results in the same increase in salary as the second year of service, then the straight-line assumption is met. If, however, raises and promotions come more frequently in earlier years of employment than in later years, then the assumption will not hold. Deviation from the assumption may reduce the predictive capacity of the regression analysis model and also affect the sex coefficient. Use of exponential or logarithmic terms (e.g., "years of service squared") may compensate for non-linearity. Id. at 277. In the present case, there is no evidence to indicate whether plaintiffs' variables meet this "straight-line" assumption. The assumption is mentioned because it is

another possible source of error in plaintiffs' regression analyses. Plaintiffs bear the burden of demonstrating "that the assumptions necessary for the model's use [have] been satisfied." Sobel v. Yeshiva University, 566 F. Supp. 1166, 1182 (S.D.N.Y. 1983). Failure to validate the model by showing that the variables in the models meet the straight-line assumption diminishes the probative value of plaintiffs' regression analysis models.

Another structural problem with regression analysis is the phenomenon known as "attenuation." Attenuation occurs when a predictor variable in the regression equation is measured with some inherent error. Ex. 2782 at 115. For example, if the predictor variable to be measured is "actual relevant

experience," use of the "years since" variables as proxies introduces measurement error vis-a-vis the ideal predictor variable. Additionally, there may also be error in the measurement of the values of the proxy variables themselves. The result of this inherent error is that the value of the ideal predictor variable is often wrongly stated, sometimes too high and sometimes too low.

This inherent error produces a "flattening" effect on the regression line; that is, the slope of the line is lessened and the model does not measure as strong a relationship between the explanatory variable and the variable to be predicted as actually exists. Testimony of Dr. Paul Meier, Tr. at 23,533-34. When the groups under study are not equally distributed with respect

to the explanatory variable, the regression analysis will produce the appearance of differences in treatment between the groups after controlling for the explanatory variable, even when none in fact exists. In the present case, for example, because women have on the average lower levels of experience than men, the attenuation phenomenon will produce negative sex coefficients even if no discrimination is actually present.[19] This result is a "statistical artifact" caused by the mechanics of the regression technique itself. Id. at 23,535. It is important to note that the attenuation phenomenon is wholly distinct from the problem of the selection of variables that may themselves be systematically biased. Attenuation may occur even though the errors in the measurement of the

explanatory variables are not systematically biased. Hence, the use of proxy variables may lead to the appearance of sex discrimination even where none exists, both (1)because the proxies themselves are biased (which is true in this case) and (2)because of attenuation, even if the proxies themselves are unbiased.

Plaintiffs attempt to address the issue of attenuation in their rebuttal report; however, the discussion is very brief and is not accompanied by the actual results of the studies plaintiffs ran to check for attenuation. The Board's expert Dr. Meier testified that "the description of the outcome [of these studies] was so brief I couldn't make out what it really did tell us." Tr. 23,535. The two approaches used by plaintiffs were described as "a type of sensitivity

analysis" and "reverse regression." Plaintiffs' rebuttal report at 115-16. The result of the sensitivity analysis suggests "that even with errors in the qualification variables large enough to account for a 10 per cent difference in salary, the sex coefficients would remain negative and statistically significant." Id. Of course, this does not indicate the extent to which the magnitude of the negative sex coefficients are increased by the attenuation phenomenon. The reverse regression[20] results were "variable, with some significant differences at a few institutions. . . ." Id. at 116.

From this evidence, the court concludes that attenuation is another problem with plaintiffs' regression analyses, and may result in the generation of negative sex coefficients

even though no discrimination is actually present.

Data Base Quality

Another issue involving the statistical evidence of both parties is that of data base quality. All other factors being equal, statistical evidence based on correct data will have more probative value than statistical evidence based on inaccurate data. Hence, it is important to examine the correctness of the data base.

The data used in plaintiffs' and the Board's regression analyses are those contained in the Board's personnel data base. This data base contains a variety of information on all faculty members employed by the eight institutions. Since 1968, the data base has been computerized. Although there is a centralized data processing facility for

the entire Oregon State System of Higher Education, its function is primarily technical. Changes and additions to the data base are made at the institutions themselves. Testimony of David Smith, Tr. 23,459-66. There are relatively few systematic checks to insure that the data in the system are accurate. Because the institutions themselves do not rely on the information in the data base in making personnel decisions regarding salary, promotion, and tenure,[21] there is no impetus for either employer or employee to be concerned with errors in the data base except for salary. Because paychecks are generated from salary data on the tape, errors in salary data are ordinarily brought to the attention of the employer by the employees.

Thus, there is a possibility of errors in the data base with respect to the

explanatory variables used by the parties. Plaintiffs claim that they are entitled to rely on the Board's data base for their statistical studies, and are entitled to a presumption that the data are accurate, notwithstanding evidence to the contrary. However, this is not the law. All relevant information about faculty within the Oregon state system was available to plaintiffs through the discovery process. For example, plaintiffs had access to the vitae of faculty members and could have used these to check the accuracy of the information on the tapes. To be sure, this would have been a time-consuming task, but it would have been an equally difficult task for either party.[22] This is not a situation where an employer has more ready access to employment information than employees.

Although "plaintiffs cannot legitimately be faulted for gaps in their statistical analysis when the information necessary to close those gaps was possessed only by defendant and was not furnished . . . to plaintiffs," Trout v. Lehman, 702 F.2d 1094 at 1102 (D.C. Cir. 1983), vacated on other grounds, ___ U.S. ___, 79 L.Ed.2d 1404 (1984), quoting Trout v. Hilgado, 517 F. Supp. 873 at 883 (D.D.C. 1981), such a situation is not present here.[23] The deficiencies in data quality in this case may detract from the value of statistical evidence. Spaulding, 740 F.2d at 704; Trout v. Lehman, 702 F.2d at 1101. Therefore, to the extent that plaintiffs' statistical analyses are based on erroneous data, they are less probative.

Ample evidence demonstrates that the

Board's personnel data base tapes are inaccurate. Plaintiffs' own witnesses testified to the inaccuracy of the data on the tapes. See, e.g., testimony of Dr. Anna Penk, Tr. 1075, 1291-92.[0C]24[0D] Plaintiffs also presented evidence of the inaccuracy of the tapes in their rebuttal report. Plaintiffs subjected their original data base to a computer program that checked for "anomalies" in the data. The anomalies program identified certain data thought to be erroneous, essentially by locating bizarre data. For example, it flagged as possibly erroneous salaries listed as less than $1000 or more than $95,000. All other salaries were assumed to be accurate. Hence, the anomalies program only picked up a few obvious errors. Plaintiffs then checked the data located by the program against certain

information used by the Board, such as Dr. Siskin's promotion and tenure sheets and institutional correction sheets (discussed below) and school catalogues. Plaintiffs also personally contacted individuals at the institutions. The exact number of corrections made is not known, although Dr. Ramsey testified that a "reasonable guess" was that 500 individuals had data changes as a result of the anomalies search. Tr. 21,276. Plaintiffs then ran a regression analysis for salary at Oregon State University using both the uncorrected and the corrected data base. Table 9 of Ex. 2782 shows that the limited corrections to the data base resulted (1) in an 11.4 per cent decrease in the magnitude of the negative sex coefficient, and (2) a 2.3 percent increase in the magnitude of the adjusted R^2 of the model.[25] Hence, use

of more accurate data results in a more predictive regression analysis model with decreases in the magnitude of the negative sex coefficients.

On the other hand, the Board undertook a more extensive data-cleaning program. Dr. Siskin checked the data for missing, inconsistent, or dubious information and requested verification from the institutions regarding such data. He also had the institutions gather information for his promotion and tenure studies. Then he cross-checked this information against the information on the tapes and asked the institutions to verify any inconsistencies.

The Board also chose to use tapes archived at a different time of the year than the tapes used by plaintiffs. Plaintiffs used tapes generated in November; the Board used tapes generated

in July. The Board used the July tapes because: (1) some updating of information occurs between November and July during the academic year, and is reflected on the July tapes but not on the November tapes; (2) the July tapes more accurately reflect the FTE of faculty for the entire year; for example, by using the November tapes plaintiffs will have recorded a faculty member who worked at 1.0 FTE for the fall term and then left the institution as having an FTE of 1.0 throughout the entire academic year, while by using the July tapes the Board will have recorded the individual's actual FTE level over the whole academic year;[27] and (3) raises are sometimes delayed past the early part of the academic year, and hence may not appear on the November tapes, but will appear on the July tapes. See Testimony of Dr.

Siskin; Tr. 22,812-15. Thus it appears that the data used by the Board in its regression analyses are more accurate than those used by plaintiffs.

To conclude, the court finds that (1)the July tapes are more complete, accurate, and appropriate for use in the regression analyses than the November tapes; (2)the Board's personnel data base tapes contain errors, particularly with respect to highest degree and year of highest degree; (3)the Board's data-cleaning process, along with its use of the July tapes, results in a more accurate data base than that used by plaintiffs; (4)no substantial evidence exists to indicate that the information collected by the Board in its attempt to clean the data is systematically biased in such a way as to produce results more favorable to the Board; and (5) to the

extent that Dr. Siskin's promotion and tenure data are erroneous as to Western Oregon State College (a conclusion the court is unable to draw), the errors are not systematically biased in favor of the Board.

The Probative Value of Plaintiffs' Statistics

Of what ultimate effect are the methodological deficiencies in plaintiffs' regression analyses? Plaintiffs take the position that the Board's criticisms should be of no effect unless the Board presents its own regression analyses in which the deficiencies are corrected. Plaintiffs contend that "unquantified, speculative, and theoretical objections to the [plaintiffs'] statistics are properly given little weight by the trial court. ..." Trout v. Lehman, 702 F.2d at 1102.

However, this court finds that the Board's criticisms of plaintiffs' methodology are substantial and significantly lessen the probative value of plaintiffs' regression analyses.

The use of complex statistical techniques as evidence in employment discrimination cases has developed rapidly in the last ten years. Yet the proliferation of the use of such complicated statistical analyses has proceeded with very little guidance from appellate courts as to how rigorously complex statistics should be analyzed and what methods should be used for such an analysis. From this court's review of the cases, courts seem to fall into two groups. The first "seem[s] to find the sirenlike attraction of mathematical precision too powerful to resist." P.Meier, J.Sacks & S.Zabell, What

Happened in Hazelwood: Statistics, Employment Discrimination, and the 80% Rule, American Bar Foundation Research Journal, Winter 1984, 139, 162 (1984). Such courts place great credence in the results of complex statistical analyses, seemingly accepting the statistics as determinative, with little or no discussion or consideration of the flaws in the statistical techniques themselves. See, e.g., Melani v. Board of Higher Education of the City of New York, 561 F. Supp. 769 (S.D.N.Y. 1983); Trout v. Hilgado, 517 F. Supp. 873 (D.D.C. 1981), aff'd sub nom Trout v. Lehman, supra; Segar v. Civiletti, 508 F. Supp. 690 (D.D.C. 1981), aff'd sub nom Segar v. Smith, 738 F.2d 1249 (D.C. Cir. 1984). Other courts tend to be more sensitive to the "inherently slippery nature" of statistical evidence, Spaulding, 740

F.2d at 703, and require a greater showing that the statistical models used by parties are valid before accepting the results of such models as probative. See, e.g., Sobel v. Yeshiva University, 566 F. Supp. 1166 (S.D.N.Y. 1983); Coser v. Moore, 587 F. Supp. 572 (E.D.N.Y. 1983), aff'd 739 F.2d 746 (2d. Cir. 1984).

From both a legal and a logical standpoint, this court finds that the latter group's position is the more appropriate. The Spaulding opinion indicates that trial courts should under take a rigorous analysis of complex statistical evidence. An examination of the finer points, as well as the larger ones, in plaintiffs' regression analysis models is essential. "This is especially true when we are asked not only to take [statistics] for what they

mean, but also to draw an inference from them as to motive." Spaulding, 740 F.2d at 704. A rigorous examination of the individual "working parts" of plaintiffs' models is crucial to a determination of the probative value of the results of those models. The burden of proof always rests with the party offering and relying upon complex statistical methods to establish the validity of those methods in light of the facts of the specific case to which they are applied. To the extent that the Board has convinced the court that significant flaws exist in plaintiffs' regression analysis models, the probative value of the results generated by those models is decreased.

The Board has convinced the court that plaintiffs' regression analysis models are flawed. Further, the Board's

objections are not merely "unquantified, speculative, [or] theoretical." Trout, 702 F.2d at 1102. These flaws in the plain tiffs' models result in larger negative sex coefficients. Hence, the models give the appearance of discriminatory treatment of women even though none may exist. In particular, the Board has demonstrated that

> --plaintiffs' "years since" variables overstate the actual relevant qualifications of women;
>
> --plaintiffs' failure to account for differences between full-time and part-time faculty biases the regression in favor of women;
>
> --plaintiffs' failure to account for non-Ph.D. terminal degrees influences the regression results, as does the failure to take into account the quality of a faculty member's degree-granting institution;
>
> --plaintiffs' failure to control for the interactive effect of the department

variable biases the plaintiffs' models in favor of women, and failure to account for other interactive effects may also affect the model;

--the phenomenon of attenuation has an effect on plaintiffs' regression results favorable to plaintiffs;

--plaintiffs have failed to show that the "straight-line" assumption is valid in this case;

--the data used by plaintiffs in their regressions are inaccurate to some degree, and inaccurate data tends to result in larger negative sex coefficients.

The court rejects plaintiffs' notion that these flaws must be ignored unless the Board comes forward with a regression model in which the flaws are corrected. First, in several instances plaintiffs' own evidence indicates that the flaws do in fact produce larger negative sex coefficients. Second, the Board's non-regression statistical evidence tends to

show an absence of a pattern or practice of discrimination, from which the court may infer that the results of plaintiffs' regressions may be due to methodological flaws. Third, insofar as the anecdotal evidence does not support a finding of a pattern or practice of discrimination, the same inference may be drawn. Finally, as the party offering regression models as proof and as the party with the ultimate burden of persuasion, plaintiffs bear the burden of "validating" their regression models; that is, of demonstrating "that the assumptions necessary for the model's use [have] been satisfied." Sobel, 566 F. Supp. at 1182.

To conclude, the court is convinced that the plaintiffs' regression models suffer from methodological flaws such that even if a wholly nondiscriminatory

environment exists within the Oregon State System of Higher Education, plaintiffs' regressions would show negative sex coefficients, indicating an adverse treatment of women. This has two implications. First, plaintiffs repeatedly argue that even in those instances when their regression analysis results are not statistically significant, the fact that there is an overwhelming pattern of negative sex coefficients in the results is indicative of a pattern or practice of adverse treatment of women. However, if in fact plaintiffs' models will produce negative sex coefficients in a discrimination-free environment, then a pattern of negative sex coefficients is to be expected in the regression results. Second, the flaws in plaintiffs' models also inflate the magnitude of the

negative sex coefficients. Because the statistical significance of a result turns in part on the magnitude of the coefficient (the t-value being computed by dividing the coefficient by its standard error), it is impossible to tell whether the statistically significant results which were produced by plaintiffs' models would be negative and still statistically significant if the models were not flawed.

The Board may argue at this point that plaintiffs' pattern or practice class claim must fail. However, the flaws do not render plaintiffs' statistics wholly meaningless. Hence, the court will examine the statistical and anecdotal evidence relating to the claims of discrimination in rank and promotion, salary, tenure, and advancement to administrative positions,

keeping in mind the known flaws in plaintiffs' models in the process of drawing conclusions. It is to this task the court now turns.

CLASS CLAIMS FOOTNOTES

1. It is unclear after Spaulding whether plaintiffs must show that on the average men and women faculty, members per form substantially equal work or merely comparable work. On the one hand, the court stated that "we must evaluate the extent to which . . . statistics show comparability [of jobs] and then to what extent the comparability showing, along with other evidence of discriminatory animus, supports an inference of illegally discriminatory motive." 740 F.2d at 704. On the other hand, the court also noted that "[i]ntuitively, evidence of a pay disparity between jobs that are only comparable says very little about discrimination." Id.

2. Plaintiffs' expert statisticians' report (Pl. Ex. 1) explains multiple linear regression as follows:

> A more refined analysis, taking into account other variables which might predict salary, was conducted by means of multiple linear regression. This gives an average dif ference in salaries between men and women controlling for differences in various productivity variables. The basic methodology is to estimate the relation between salary and predictor variables such as degrees, teaching experience and other relevant factors. We give a brief explanation of the procedure:
>
> First, consider how salaries change.

If one has a salary of say, $10,000 and is given a promotion (or merit increase, etc.), the change in salary is stated as a raise, "r" say. If the raise is r=5%, the new salary is then computed as

S = (1 plus r/100) S = (1.05) ($10,000) = $10,500 Thus, one's salary at any given time may be viewed as a starting salary at time of hire multiplied by a string of constants, each representing a raise given for some achieve ment. On a logarithmic scale, the constants appear as additions to the logarithm of the base salary. And because regression techniques develop explanatory models that incorporate factors additively, we have taken the logarithm of salary as the response variable.

The methodology consists of estimating a relationship between the response and the predictor variables such as highest degree, years of experience, etc. The estimating equation looks like this:

log salary = b_o + b_1 (degree) + b_2 (years of service) + b_3 (age at hire) + ...

The constants b_o, b_1, b_2, etc. reflect raises in the following way. If a raise of r_1 is given for obtaining a Ph.D., then

b_1 = log (1 plus r_1/100).

Similar equations relate b_2 to the average raise given per year of service, b_3 to the average premium per year paid for additional (pre-hire) years of experience, and so on. The constant b_o is the logarithm of the initial salary at time of hire, averaged for all persons at an institution.

3. If the omitted variable is not related to any of the variables in the model, the omission will decrease the predictive capacity of the model.

4. Defined as present age minus the years since the individual was first hired into the Oregon State System of Higher Education. Significantly, neither the Oregon State Board of Higher Education personnel data base nor the parties themselves made adjustment in the "service year" (year of first hire) for those faculty who did not work for some period of time after "first hire".

5. Defined as present year minus year of first hire into the Oregon State System of Higher Education. See footnote 3, supra.

6. The discipline variable simply accounted for dif ferences in the average salary of different department groups. Adding a discipline variable such as this is not the same as running a regression by discipline or including interaction terms to account for the differing values placed upon the explanatory variables by different disciplines.

7. Only the highest degree obtained is coded non-zero, however; for example, a person with a Ph.D. degree obtained two years ago who had obtained a masters degree ten years ago would be coded the same as a person who obtained a Ph.D. degree two years ago and a masters degree three years ago. See Ex. 2782 at 23.

8. This is not a situation where the actual qualification plaintiffs seek to control for is subjective or non-quantifiable. The qualification sought to be measured by the "years since" proxy variables -- actual relevant experience-- is predominantly objective in nature and hence theoretically measurable in numbers.

9. Evidence presented showed that this is to be expected given the higher percentages of men with doctorates in this group. See Pl. Ex. 2757; Ahern and Scott; Career Outcomes in a Matched Sample of Men and Women Ph.D.'s; National Academy Press, 1981; Table 1.1, Number of science, engineering, and huma nities doctorates awarded to men and women annually, 1940 to 1978; p.2.

10. A negative sex coefficient on a regression result indicates that women are treated less well than men with respect to the employment outcome at issue. The larger the magnitude of the sex coefficient, the greater the disparity between men and women.

11. See testimony of Dr. Fred Ramsey, Tr. 1930, 1935. Plaintiffs' own studies show that there is a positive correlation between FTE and salary and that a greater percentage of women in the Oregon State System of Higher Education tend to be on part- time than do men.

12. Failure to control for present and past FTE level will also have an effect on plaintiffs' rank and tenure regressions. All other factors being equal, it is to be expected that faculty

members who have worked part-time throughout their careers in the Oregon State System of Higher Education will be at lower rank and tenure levels than those faculty who have worked full-time. Because more women than men are in part-time posi tions, failure to account for FTE level in the regression model results in the generation of negative sex coefficients of larger magnitudes than would exist if FTE were included as a variable.

13. Indeed, plaintiffs argue that the fact that women and men were given equal raises for the period 1978-83 is evi dence of generally equal productivity.

14. Nor does the court agree with the statement made during closing argument that Title VII requires all employees to be treated fairly. All Title VII requires is that if employees are treated unfairly, it is not because of their sex. In large bureaucratic institutions, individuals may be treated unfairly from time to time. Yet a Title VII violation is not made out simply by showing that a female faculty member was treated unfairly; Title VII requires that the unfair treatment be due to sex discrimination.

15. Plaintiffs attempted to control for some quality variables in their vita-matching study. However, as discussed later, this study has such serious methodological deficiencies that its probative value is nil.

16. Use of words such as "reward" and

"value" in describing the different coefficients attached to explanatory variables in different departments is metaphorical shorthand. The difference in the value of coefficients between departments may have nothing to do with the department "rewarding" on the basis of the variable at issue. For example, if one department frequently hires senior faculty at the upper ranks while a second only hires Ph.D.'s fresh out of school, the coefficient for "years of service" will be larger in the first department due to the greater number of senior faculty with high pay and low years of service. It thus appears that the first department is "rewarding" years of service more than the second department, when in fact no such process is occurring.

17. The additivity assumption is that the contribution of two explanatory variables in explaining a result can be most reliably computed simply by adding the separate average contribu tion of each. See Baldus & Cole at 278. If the magnitude of one variable changes in a way related to another variable, this assumption is not met.

18. The following is an example.

	DEPARTMENT 1	
	Ph.D.	non-Ph.D.
Men	$30,000 (8)	$10,000 (2)
Women	$30,000 (2)	$10,000 (1)

	DEPARTMENT 2	
	Ph.D.	non-Ph.D
Men	$20,000 (2)	$15,000 (1)

Women $20,000 (8) $15,000 (2)

Assuming the only two variables determining salary are department and holding a Ph.D. degree, and further assuming that the assign ment of women into department 2 was non-discriminatory, a simple examination of the tables reveals that there is no discrimination occurring because of sex. Note, however, that there are more men in department 1, which places a higher value on having a Ph.D. degree, and there are more women in department 2, which places less value on having a Ph.D. degree. A regression analysis, however, attempts to explain outcomes based on the average value of having a Ph.D. degree. In the example, the average reward over the entire group for receipt of the Ph.D. degree is $12,500. The average salary of department 1 is $20,000; the average salary of department 2 is $17,500. We may now predict the salary of each individual, using the average value of having a Ph.D. degree and adjusting for the average salary difference of the departments (essentially the procedure employed by plaintiffs in their regression). For example, the salary of a person with a Ph.D. degree in department 1 would be predicted by our simple model to be $20,000 (the average salary in the department) plus $6,250 (half of the average value of having the Ph.D. degree over not having the Ph.D. degree); the salary of a person without a Ph.D. degree in department2 would be predicted as $17,500 (the average salary in the department) minus $6,250 (half of

the average value of the Ph.D. degree). If we then separately compute the average salaries predicted by our model for men and women, and compare them to the actual average salaries of men and women in our example, the following results occur:

	Men	Women
Average Salary		
PREDICTED	$22,788.46	$21,442.31
ACTUAL	$24,230.77	$20,000.00

It appears that discrimination exists, because men are actually paid more than the model predicts and women are paid less than the model predicts. Yet no discrimination is present in the example. The appearance of discrimination is caused by the fact that more women than men are in the department that places rela tively less value on the Ph.D. degree.

19. See M. Finkelstein, The Judicial Reception of Multiple Regression Studies in Race and Sex Discrimination Cases, 80 Colum. L. Rev. 736, 747 (1980), for a hypothetical example of how the attenuation phenomenon can cause a regression analysis to produce the appearance of strikingly large differences in the treatment of men and women when in fact they are treated identically.

20. In a reverse regression, qualification variables are regressed on salary, rather than vice versa. In other words, the reverse regression model attempts to predict qualifications by looking at salary. Dr. Meier testified

that he did not consider reverse regression a good technique. Tr. 23,535.

21. Such decisions occur at levels where the rank, degree, years of service, and other qualifications of individuals under consideration are either known first-hand by the decision makers or are available from other information, such as vitae, kept at a departmental or institutional level.

22. Although plaintiffs requested information regarding faculty members through interrogatories, the Board's response -- that the information was available in a not-necessarily accurate form on the computer tapes or in individual files that plaintiffs could look through if they wanted -- comported with Fed. R. Civ.P.33(c). This rule gives a party served with interroga tories the option to produce business records from which the information requested by the interrogatories can be obtained, if it appears that the cost to either party of culling the infor mation from the business records is substantially the same. As this was so in the present case, the court finds that the Board's response was appropriate.

23. This position -- that the Board had the obligation to locate for plaintiffs all relevant documents from which plain tiffs could derive relevant information regarding the qualifica tions of faculty members but had no obligation to update or correct its computerized data base beyond what it would do in the ordinary course of business -- was

reflected in this court's Order of June8, 1983. The Board was ordered to supply plaintiffs with the tape of the corrected June,1983 data base precisely because the Board had made the corrections in the ordinary course of business.

It should also be noted that plaintiffs did in fact receive information regarding the corrections the Board made to its data base. However, plaintiffs chose not to incorporate these changes into their data base.

24. Although Dr. Penk attempted to show that the errors in the data base were systematically biased in favor of the Board, Tr. at 1078-80, her study involves only one school and insufficient numbers from which the court could conclude that the institutions in the Oregon State System of Higher Education systematically neglect to upgrade the qualifications of women on the Board's tapes.

25. The adjusted R^2 measures the percentage in variation in the dependent variable (here salary) explained by the variables in the model. It is thus a measure of how well a regression model predicts employment outcomes.

26. Dr. Penk testified that the data used in Dr. Siskin's earlier promotion and tenure studies were inaccurate, at least at Western Oregon State College. Tr. at 1102-35. After Dr. Penk's testimony, the class was redefined and Dr. Siskin did another promotion and tenure study. Plaintiffs also claimed that the data in this study

were inaccurate. See Ex. 2782 at 45-50. However, Dr. Penk, who did the actual data examination, did not testify with respect to this portion of Ex. 2782, and hence the Board did not have the opportunity of cross-examining this portion of the exhibit. Dr. Penk's study was also done prior to the class redefinition, and hence it is possible that some of the differences between her data and Dr. Siskin's data result from the change in the class. Thus it is difficult to determine whether Dr. Penk's or Dr. Siskin's data are more accurate. Interestingly enough, plaintiffs themselves used Dr. Siskin's promotion and tenure study data when checking data flagged by their anomalies program. Ex. 2782 at 54.

27. For example, although the class as certified is restricted to faculty members of .5 FTE and above, the evidence indicates that a number of individuals were included in plaintiffs' computer matching study who were in fact at less than .5 FTE for the entire academic year under study, because the November tapes less accurately reflect FTE for the entire academic year.

INTERPRETATION OF REGRESSION ANALYSIS RESULTS

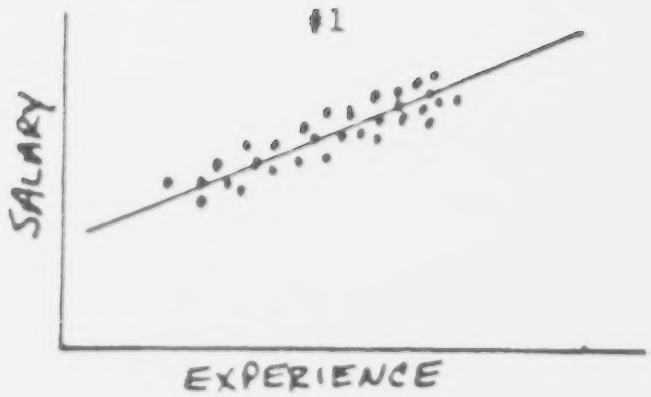
Before analyzing the results of specific regression analyses, it is important to understand the significance of the numbers produced by the regression analyses.

Regression analyses attempt to ascertain the average effect of a certain quality on an employment (or other) outcome. The average effect of the quality is represented by the coefficient for the variable representing the quality. In a salary regression analysis, for example, coefficients measure the effect on salary outcomes of a per unit change in the explanatory variables. Coefficients can be expressed in a number of different ways.[1] The coefficient for the residual explanatory variable of sex

is a measure of the average difference in salary between men and women after all other variables in the model are taken into account.[2] Because of the way the sex variable has been coded (+1 for women and 0 for men), a negative sex coefficient indicates a difference adverse to women, while a positive sex coefficient indicates a difference favorable to women.

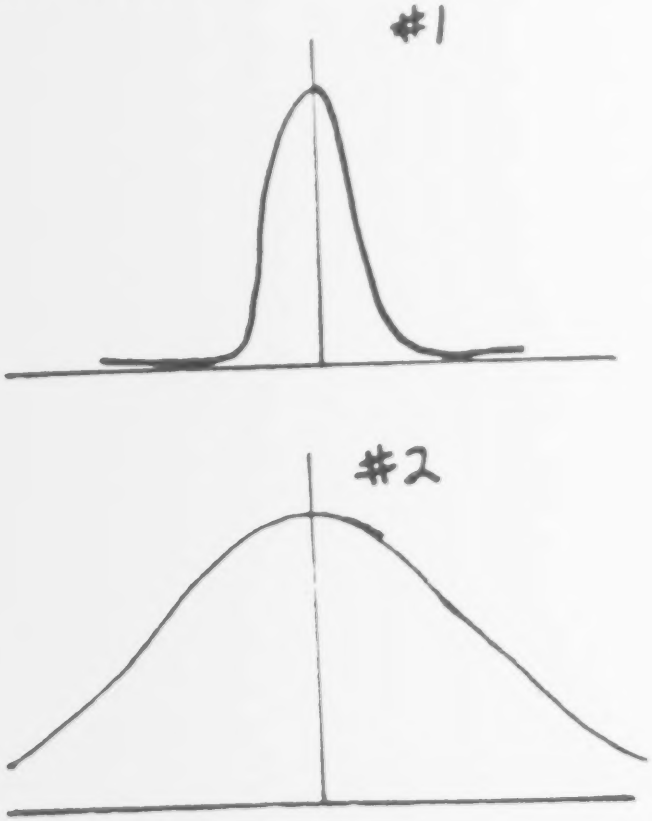
A second important series of numbers generated by a regression analysis are the t-value or number of standard deviations, the p-value, and the standard error. These numbers all attempt to measure the extent to which the average value of a variable as represented by its coefficient may be affected by chance. Any relationship between a variable and an outcome may be affected to a greater degree or a lesser degree by

chance.



For example, although the value for the coefficient of the "experience" variable will be the same in both

situations above (because the slopes of the two lines are the same), it is obvious from the diagrams that a much closer relationship between experience and pay exists in figure #1 than in figure #2. If one looks at and plots the spread of the actual observations around the regression lines, something like this will result:[3]



The standard error associated with a regression analysis coefficient is a measure of the variability that may exist in the actual, observed data; in other words, the standard error indicates how far apart the actual, observed values of the coefficient are likely to be from the average coefficient measured by the regression equation. The standard error value will also be influenced by the number of observations under study. The greater the number of observations, the smaller the standard error value produced by the regression analysis, all other things being equal.

A coefficient's standard error is the value associated with one standard deviation. In a normal distribution, about 68% of the total actual observed values will be within one standard deviation of the average value, and about

95% or 96% of the total actual observed values will be within two standard deviations of the average value. Thus, a coefficient of .10 with a standard error of .05 means that 68% of the actual observed values fall within .05 (one standard deviation below the estimated value) and .15 (one standard deviation above the estimated value), and similarly that about 95% of the actual observed values will fall between .00 and .20. See Baldus & Cole at 294-96.

A coefficient's standard error is the value associated with one standard deviation. Dividing the value of a coefficient by its standard error produces the t-value associated with the coefficient. In the example above, the t-value will be .10/.05 or 2.0. The t-value represents the number of standard deviations that the coefficient

generated by the regression model is away from a value of zero. Because a value of zero for a coefficient means that the variable being studied has no effect on employment outcomes, the t-value is a measure of the extent to which the coefficient is statistically significant -- that is, the t-value is a measure of how much the coefficient produced by the regression analysis varies from zero due to factors other than pure chance.

T-values may be converted to p-values or probability values. In a normal distribution, 95% to 96% of all actual values will fall within a plus-or-minus two standard deviation range from the average coefficient value. Thus a t-value of 2 is associated with a p-value of about .05, meaning that there is a 5% probability that any actual observed value of a coefficient will

fall more than two standard deviations above or below the estimated value of the coefficient due purely to chance. In the example above, odds are one in twenty that the actual value of the coefficient estimated by the regression model to be .10 will in fact be greater than .20 or less than .00.

A final important number generated by the regression analysis is the $\underline{R}^2$ or $\underline{\text{adjusted } R}^2$. These numbers represent the percentage of total variance in a dependent variable (e.g., salary) that is explained by or associated with the explanatory variables in the regression model. See Baldus & Cole at 259. The R^2 is thus a measure of how well the regression analysis works in predicting employment outcomes by using the variables in the model. By adding variables to the model sequentially, the

R^2 may also show how much individual factors contribute to salary outcomes.

It is stressed that the terms under discussion (except for the R^2 value) are all concerned with the extent to which regression analysis results may be due to pure chance or random variation. The values for these terms say nothing about the validity or propriety of the model itself. As an example, plaintiffs report that the average difference between male-female salaries at the University of Oregon in 1979-80 is 20.7%. (Ex.2782 at 98.) The t-value for this coefficient is 9.51 standard deviations, which is highly statistically significant. However, the high degree of statistical significance indicates only that the difference in the average salaries of men and women do not likely result from chance. The high

degree of statistical significance says nothing about the validity of the assumptions behind the regression analysis model that produced the figures. Here the model took no job qualifications whatsoever into account; hence the court is very reluctant to infer any discrimination from the result even though the magnitude of the difference is large and the statistical significance of the coefficient is high. A finding of statistical significance is necessary in order to infer discrimination from a regression analysis result. However, a statistically significant result is not necessarily probative of discrimination just because it is statistically significant.[4]

A distinction must be made, then, between the concept of statistical significance and the concept of practical

significance. A statistically significant regression analysis result simply means that the difference being measured does not likely occur because of chance. Whether a statistically significant result is practically significant must be determined with reference to the hypothesis the regression model is attempting to prove and to the validity of the model itself. In the present case, plaintiffs allege that the Board engages in a pattern or practice of discrimination against women faculty members because of their sex; to prevail, plaintiffs must show that this is the Board's standard operating procedure, a regular rather than an unusual occurrance. Given that this is the hypothesis plaintiffs' statistics attempt to prove, it may be that a statistically significant negative sex

coefficient of a very small magnitude will be deemed by the court to be of no practical significance. For example, if a salary regression analysis result produces a statistically significant sex coefficient of -.02, this means that male-female salary differences are not due to chance. But this sex coefficient alone does not say whether the overall average differences are produced by a pattern of sex discrimination, by flaws in the plaintiffs' model, by every female faculty member in the system being paid 2% less than precisely equally qualified males, or by most men and women being paid equally but in a few cases men being paid much higher salaries than equally qualified women. Because sex coefficients of small magnitudes may result from a small number of cases of discrimination, such

coefficients may be practically insignificant with reference to the pattern and practice issue in this case even though they are statistically significant.[5]

Aggregation

A very important issue relating to the statistical significance of the regression analysis results is the issue of aggregation. Plaintiffs brought this action as a system-wide class action against the Board, not as eight separate class actions against eight separate institutions. Hence, plaintiffs take the position that after the individual regression analyses at the individual institutions, it is appropriate to aggregate the results over the entire system. Because an increase in the number of observations results in a substantial increase in t-values, the

effect of aggregating the plaintiffs' results system-wide is to produce statistically significant coefficients in practically every situation. The Board argues that aggregation of results is improper, because each institution is autonomous with respect to salary, promotion, and tenure decisions. The Board contends that results can only be aggregated at the institutional level, and that aggregating over the entire system is simply a device used by plaintiffs to generate a higher level of statistical significance.

The aggregation issue is similar but not identical to the issue of whether a system-wide class action is appropriate. The propriety of a system-wide class is to some extent bound up with the merits of plaintiffs' substantive pattern or practice claim: If plaintiffs can prove

that a pattern or practice of discrimination occurs at each institution, this might provide the nexus between the eight institutions and the Board necessary to support a system-wide class. See Opinion and Order of August 10, 1984 at 13-15. Plaintiff's statistical evidence attempts to prove that such a pattern or practice of discrimination exists at the institutions. Logically, however, aggregating statistical results over all institutions in order to prove that a pattern or practice of discrimination exists at each institution "puts the cart before the horse". If plaintiffs' statistical evidence does not show statistically significant sex-based differences at four of the eight institutions, for example, this is information that must be considered by

the court when it determines both whether a system-wide class is appropriate and whether system- wide aggregation is appropriate.

The propriety of aggregating statistical results over all eight institutions is to a large degree a factual issue rather than a legal one. The propriety of aggregating statistical results in any given set of circumstances turns on facts peculiar to the situation under study. As discussed elsewhere, the Board has little or no influence over individual employment decisions made at the institutions. Indeed, high-level administrators at the various institutions often have little or no influence over employment decisions; the majority of employment decisions are made at departmental levels. The court finds that it is more appropriate to

examine the statistical results at each institution than to rely on the aggregated results. The court can obtain no more information regarding the existence of a pattern or practice of sex discrimi nation in the Oregon State System of Higher Education by examining aggregated results than it can by examining each of the individual results. The primary effect of aggregation is simply to produce higher t-values due to the increased number of observations. In light of the hypothesis plaintiffs are attempting to prove with the statistical evidence, aggregated results are less probative than the results from each individual institution.[6]

Interpretation of Regression Analysis Results Footnotes

1. For example, coefficients may be expressed in absolute dollar amounts. See, e.g., Ex. 8202. In such a case the coefficient represents the actual change in salary in dollars associated with a unit change in the explanatory variable. Because most of the regressions in this case are in logarithmic form, the coefficients generated by the regressions are not in easily understood units. Many of the expert witnesses treated the sex coefficients in the logarithmic regressions of salary as representing the average percentage difference in the salary of men and women after the other variables in the models were taken into account. Thus, a sex coefficient in a salary regression of -.10 was said to mean that after accounting for all other variables, women's salaries were on the average 10% lower than men's. However, this is only an approximation; the actual percentage differences differ from the value of the coefficients. See, e.g., Ex. 1, Table 19.

2. This statement is an over-simplification. Because the sex coefficient is a residual variable, it picks up and is affected by (1) biases in the other variables that are related to sex; (2) the effect of technical phenomena such as interaction and attenuation; and (3) the omission of variables from the model that are related to sex. The statement is only true if the regression model is "perfect."

3. The discussion herein assumes that the pattern of variance for all coefficients conforms to a normal, bell-shaped curve, pattern of distribution.

4. Generally, a t-value of 2.0 or greater is accepted as sufficient for a finding that a regression analysis coefficient is statistically significant. See Hazelwood School District v. United States, 433 U.S. 299, 308, 311 ns. 14, 17 (1977); Castaneda v. Partida, 430 U.S. 482, 496 n. 17 (1977). Most of the experts at trial also agreed that the two-standard- deviation test was generally accepted among statisticians and social scientists. However, the court is conscious of the fact that the two-standard-deviation test is arbitrary, and that there is no significant practical difference between a t-value of 2.05 and a t-value of 1.95; both indicate that the result obtained was not likely due to chance variation. Rather than use the two-standard-deviation rule as a hard and fast test, the court will use it as a rough approximation of the magnitude of statistical significance required before a result can be considered probative.

5. The Board tested the extent to which a very small number of cases may affect the statistical and practical significance of regression results by performing an "outlier" analysis, described more fully in the section on salary. This study tends to show that the removal of a very few individuals can have a great effect on regression analysis results.

6. The court is aware that some

courts have relied upon aggregated statistical results over geographically dispersed offices. See, e.g., Segar v. Civiletti, 508 F.Supp. 690 (D.D.C. 1981), aff'd sub. nom. Segar v. Smith, 738 F.2d 1249 (D.C. Cir. 1984); United States v. County of Fairfax, 629 F.2d 932 (4th Cir. 1980), EEOC v. Akron National Bank, 497 F.Supp. 733 (N.D. Ohio 1980). However, in none of these cases does it appear that aggregation was at issue in the case. Nor is it clear in these cases the extent to which the central body played a significant role in the employment decisions at issue. Other courts have questioned the propriety of allowing class actions (and by implication aggregation of statistical results) over geographically dispersed offices. See, e.g., Doninger v. Pacific Northwest Bell, Inc., 564 F.2d 1304 (9th Cir. 1977). Finally, in pattern or practice cases brought by the EEOC, or in private actions brought prior to the Supreme Court's decision in General Telephone Company of the Southwest v. Falcon, 457 U.S. 147 (1982), no compliance with Rule 23 was required in EEOC cases, and a much less strict adherence to the requirements of Rule 23 was required by courts in private actions.

COURT'S ANALYSIS OF RANK ISSUE

Plaintiffs' regression analysis models do not contain a variable representing a proxy for productivity. Plaintiffs' regression analysis models on salary assume that faculty members who were of the same age at the time they were first hired, who were first hired in the same year, who have the same degree or degrees, who received their degree or degrees in the same year, and who work in the same discipline are to be paid the same salary.[1] The Board objects to this assumption because it does not account for differences in productivity or academic merit among faculty members.

The Board contends that this flaw in plaintiffs' regression analyses models can be corrected by adding rank as a variable for productivity. The Board

argues that rank is a rough proxy for productivity or academic merit, because advancement to higher rank occurs when a faculty member has performed well enough that, given the standards of the institution and of the department, an advancement in rank is justified. Although rank is not a perfect proxy for productivity or academic merit, it has the advantage of being an objective piece of data that is available on the data base used by the parties. Other, more accurate measures of academic merit--teaching ability, scholar ship and research, and institutional and community service -- are difficult to quantify and hence difficult to use in a mathematical model.

Plaintiffs object to the use of rank in the regression analysis models. They argue that because rank and promotion

decisions are made by the same individuals responsible for salary decisions, the same discriminatory biases that create salary disparities will operate to create rank disparities. Hence, plaintiffs argue that rank is a "tainted" variable, because it contains elements of sex discrimination. If rank is a "tainted" variable, then the use of rank as a model will result in a positive adjustment to the sex coefficient, because part of the measure of sex discrimination will be shifted from the sex coefficient and will become "hidden" in the "tainted" rank variable.

Plaintiffs' regression analysis models assume that a faculty member's degree, when it was obtained, discipline, and longevity explain all differences in salary. The anecdotal evidence, however, is overwhelming that a faculty member's

academic merit, as measured by the quality of teaching, scholarship, and research, along with service to the institution and the larger community are important and determinative factors in decisions relating to salary, rank, and tenure. Without a variable in their regression analysis models for productivity or academic merit, plaintiffs are in the position the Ninth Circuit warned against in Spaulding--namely, relying on statistics "generated from input that failed to control for exactly those differences between individuals that can legitimately lead to their being treated differently." Spaulding, 740 F.2d at 704. If rank is a sex-neutral, rough proxy for productivity and academic merit, it is appropriate to use as a variable in the regression models. However, if rank is

not sex-neutral, its use in the regression models may be inappropriate. Therefore, the court must study rank to determine whether it is sex-neutral.

Plaintiffs' Studies on Rank

As to the class as defined by the court in its August 10, 1984, order, plaintiffs presented two studies on rank. The first is an ordered logistic regression analysis done separately for each of the eight institutions for the year 1979-80, the results of which are shown in corrected Table 4 of plaintiffs' rebuttal report, Ex. 2782(c).[2] The variables used in the model are the standard "new model" variables: highest degree (with separate indicator variables for Ph.D., M.A., or B.A.), years since each degree was received, age at the time of first being hired into the Oregon State System of Higher

Education, years since the time of first being hired into the Oregon State System of Higher Education, whether degrees received were received during employment within the Oregon State System of Higher Education, and discipline variables representing groupings of departments. Research assistants, research associates, and "support faculty" (defined as those in the ranks of instructor through full professor having FASOM[3] codes between 100 and 1999, inclusive) are excluded from the class studied by the model. The model includes senior researchers in the academic ranks and all those at the instructor rank, including part-time, non-regular instructors, both of which should have been excluded from the model in order for the model to conform to the court's Order of August 10, 1984. The rank regression is first run using the

rank of instructor as one value (coded "0") and all higher ranks as the other value (coded "1"), then run with assistant professor coded "0" and all higher ranks coded "1", and finally with associate professor coded "0" and full professor coded "1".

The results of this model are as follows: first, the sex coefficients at all of the smaller institutions (Western Oregon State College, Eastern Oregon State College, Southern Oregon State College, and Oregon Institute of Technology) for all three runs are not statistically significant at the two standard deviation level.[4] At Southern Oregon State College, the sex coefficients are all positive. This shows that after accounting for all of the variables in the model, women are generally in higher ranks than men. At

the remaining smaller schools, the sex coefficients are negative, but not statistically significant. Hence, Ex. 2782(c) shows no statistically significant evidence of sex discrimination in rank at four of the eight institutions. At the larger schools (University of Oregon, Oregon State University, Portland State University, and Oregon Health Sciences University), statistically significant negative sex coefficients occur at all three levels at all schools, except the "assistant professor vs. higher rank" level at Oregon State University.[5] Assuming the validity of plaintiffs' model, these results would tend to show that there is a difference in rank between men and women at the larger schools that is not explained by any of the variables in the model.[6]

Evaluating the practical significance of plaintiffs' ordered logistic regression analysis of rank is not an easy task. Because the regression analysis is a logistic regression analysis, the sex coefficients in Ex. 2782(c) represent the logarithm of the ratio of the odds of a man being in the higher group to the odds of a woman being in the higher group after all qualifications represented as variables in the equation are accounted for. (See Ex. 13(c); Testimony of Fred Ramsey, Tr. 1740-45.) These sex coefficients are not readily understandable, and plain tiffs did not make them any more so in their rebuttal report. However, in the statistical evidence presented with plaintiffs' first report, plaintiffs used the sex coefficients generated by an ordered logistic regression analysis

to create a more comprehensible set of figures, reflected in Exs. 13(c) and 14(b). Plaintiffs' constructed hypothetical predicted male and female rank distributions such that (1)when they were added together they resulted in the same overall distribution as actually exists in the Oregon State System of Higher Education, and (2)the odds ratios as between the male and female hypothetical distributions matched those generated by the ordered logistic regression analysis. The result was the generation of male and female rank distributions representing those predicted by plaintiffs' model. The predicted and actual distributions for women are:

RANK	PERCENTAGES		
	Predicted	Actual	Difference
Full Prof.	9.9	9.4	-0.5

Assoc. Prof.	26.9	20.7	-6.2
Asst. Prof.	36.4	37.2	+0.8
Instructor	26.8	32.9	+6.1

See Exs. 13(c) and 14(b).

The two distributions are remarkably similar. Women occupy the lower ranks with more frequency than predicted and the upper ranks with less frequency than predicted.[7] Assuming that plaintiffs' model is perfect, 13.6% of women faculty members are in an improper rank. Because increasing the rank position of one woman simultaneously results in a decrease in the percentage of women in the lower rank and an increase in the percentage in the higher rank, dividing 13.6% by two will give a rough approximation of the percentage of women in the system as a whole who are discriminated against in rank placement because of sex.[8] That figure is 6.8%. One issue is whether, even if plain

tiffs were to prove that 6.8% of the women faculty members had been discriminated against with respect to rank placement, this would be sufficient to support a finding that discrimination in rank placement at the various institutions is the "standard operating procedure -- the regular rather than the unusual practice." Teamsters, 431 U.S. at 336. The court now turns to the Board's position regarding rank.

Defendant's Criticisms of Plaintiffs' Rank Studies

The Board contends that plaintiffs' model is not valid and is misleading. The Board's first criticism is that plaintiffs' model is premised on an erroneous view of how rank assignments are made by the institutions. The Board points out that plaintiffs' model operates as if all faculty members at

each institution are lumped together and then "assigned" to a rank based on certain qualifications. The evidence shows, however, that, in general, the rank assignment of any given faculty member at any given time is determined by two factors: (1)the rank at which the faculty member was hired; and (2)any subsequent promotions to higher ranks. Faculty members are not hired and then assigned to a particular rank. Instead, faculty members are hired for positions that already carry a particular rank assignment. Advertisements for academic positions are both rank and position specific. The timing of a faculty member's promotion tends to depend on the particular department or discipline. Similarly, there are differences in departments as to the number of years of experience required outside the

institution before new faculty may be hired at a rank higher than the assistant professor entry level.

The Board argues that its studies are more tailored to the processes that actually determine rank levels than is plaintiffs' "snapshot" regression analysis model.[9] The Board contends that the court should give its studies more probative value. The general criticisms made by the Board of plaintiffs' salary studies are also made as to plaintiffs' rank studies. (See infra Evaluation of Statistical Evidence in Support of Class Claim).

Defendant's Studies on Rank

In addition to criticizing plaintiffs' studies, the Board presented studies of its own to show that rank is not influenced by sex. The Board first addresses the issue of rank at the time

of hiring. Although the use of the variables "degree" and "years since degree" inaccurately measure the quantity of actual prior academic experience and does not measure the quality of that experience, the Board uses these two variables to examine the issue of rank at the time of hiring. The Board's leading expert, Dr.Bernard Siskin, performed a relatively simple analysis. He first separated those newly hired with terminal degrees from those newly hired without terminal degrees and ran separate analyses for the two groups.[10] At each institution, Dr. Siskin listed all those newly hired from 1978 to 1983 by discipline group, in order of years since highest degree, and noted the rank of the position into which each was hired. This documentation generated a list such as the hypothetical

that follows:

TERMINAL DEGREE HOLDERS
Department X

Name	Sex	Years Since Degree	Rank at Hire
A	M	1	Assistant
B	M	2	Assistant
C	F	2	Associate
D	F	4	Associate
E	M	6	Associate
F	F	7	Associate

Dr.Siskin then went through these lists and drew a line at the point where the data indicated the break occurred between the higher and the lower ranks. He also noted the sex of those individuals "mispredicted" by his model (such as "C" above). The results of this study are presented in Tables 17-20 of Dr.Siskin's report (Ex.8186).[11] The results show two things: First, Dr. Siskin's statistical model accurately predicts a high percentage of actual ranks. Second, among those individuals "mispredicted" by the analysis, there is no pattern

adverse to women. This study, which is more closely tailored to the way initial rank determinations are made than plaintiffs' model, shows no evidence of discrimination by sex in initial rank position.

Dr.Siskin also did a regression analysis of rank at the time of hiring, again separating those with terminal degrees at the time of hiring from those without terminal degrees at the time of hiring. He first used as variables only sex and years since degree. The results[12] (Tables 21A and 21B of Ex. 8186), show that for those with terminal degrees sex is not a statistically significant factor in determining rank at the time of hiring. Indeed, at four institutions, the sex coefficients are positive (women appear to be favored). For those without terminal degrees, statistically

significant sex coefficients occur only at Oregon State University and Eastern Oregon State College, although most of the non-statistically significant sex coefficients are negative.[13]

The Board next studied the second element of rank: promotions. Even if women are not discriminated against with respect to rank at the time of hiring, if (1) women are less frequently promoted than men, or (2) if it takes longer for women to obtain promotions, then differences in rank between men and women may appear later. To study this issue, Dr.Siskin again used a simple statistical technique: he looked at the actual promotion decisions made at each institution from 1978-1983, grouping the decisions by level (i.e., "Promotion to Associate Professor" and "Promotion to Full Professor"), but not controlling for

qualification differences. One analysis was on a "promotion decision" or "event" basis, a second on a "person promotion decision" basis.[14] The results of this analysis are presented in Tables 9-14 of Ex.8186. These analyses show that there are no statistically significant differences in the treatment of men and women at any institution with respect to promotion in rank. However, the number of observations at the institutions is small, which lessens the statistical significance of the results. Furthermore, the data upon which the studies are based come from the institutions themselves and were supplied to Dr. Siskin for purposes of this litigation.[15] More often than not, women show a higher percentage of denial of promotion than do men.[16] Finally, because in some institutions a faculty

member must be nominated by his or her department to be considered for promotion, any discrimination in the nomination process will not be reflected in Dr.Siskin's analysis. To see if discrimination in nomination exists, Dr. Siskin compared the number of women actually considered for promotion as shown by his data to the number of women "expected" to be considered for promotion based solely on time in rank. The results (Table 16A and 16B of Ex. 8186) generally show that there are no statistically significant differences between the actual and expected number of women considered for promotion, except at Oregon State University and the Oregon Health Sciences University School of Dentistry in the "event basis" analysis. At the smaller schools the differences are negligible; at the University of

Oregon, Portland State University, and Oregon State University, the differences are larger and adverse to women, although still not statistically significant.[17]

Dr. Siskin also did an analysis similar to his "rank at hire" analysis described above to study actual rank position. In this study, he again separated those with the terminal degree from those without the terminal degree to predict rank on the basis of years since highest degree. He did the study separately by discipline, again because the evidence shows that significant differences exist between departments as to the amount of experience necessary before a promotion in rank occurs. The results[18] again indicate that this simple model is a very good predictor of rank, and that there is no pattern

adverse to women in those "mispredicted" by the model.

Finally, Dr. Siskin studied the average time in rank before promotion for men and women, again differentiating between those with terminal degrees and those without terminal degrees.[19] With one exception, there are no statistically significant differences between the length of time men and women stay in a given rank before promotion to a higher rank. The one exception is Eastern Oregon State College, where for promotions to full professor women average four years less in the lower ranks than men do. Generally the differences between men and women are small in absolute terms, and frequently women are shown spending less time in rank before promotion than men. This result is generally similar to the

result shown by an earlier study done by plain tiffs. (See Ex.18.)

Plaintiffs also presented an analysis of rank in connection with their computer matching study. Plaintiffs' matching study compared 169 male-female pairs who matched on department, highest degree, and service year. Of the 169 pairs, in 102 cases the man and woman were of equal rank; in 44 cases the man had the higher rank; and in 23 cases the woman had the higher rank. The Board argues that this difference may be explained by factors other than those taken into account in matching the pairs. Dr. Siskin examined those cases in which pairs did not match on rank, to see if the rank mismatches could be explained by another factor, years since degree, a rough proxy for overall experience. For each mismatched pair, Dr.Siskin

calculated the difference between the years since degree of the higher-ranked individual and the years since degree of the lower-ranked individual. He then considered a higher rank in a pair to be "explained" if the higher ranked individual had a greater number of years since highest degree. If the lower-ranked individual had more years since highest degree, or if the individuals had the same number of years since highest degree, the mismatch remained "unexplained." The results (Ex. 8190; the unexplained mismatches are circled) show that out of 66 mismatched pairs, 41 are "explained" by differences in years since highest degree. Of the 25 remaining mismatches, 17 favor men and 8 favor women. If the "others" institution is excluded (and most of these individuals may no longer be in

the present class), 18 mismatches remain, 12 favoring men and 6 favoring women. Of the 12 mismatches favoring men, 5 occur at one institution (Portland State University). If Portland State University is excluded, out of 103 pairs at the seven remaining institutions there are 13 "unexplained" mismatches, men having the higher rank in 7 cases, and women having the higher rank in 6 cases. Hence, plaintiffs' matching study, when refined by Dr.Siskin's simple explanation, provides no evidence that a pattern or practice of discrimination against women exists with respect to rank.

Vita Matching Study

In an attempt to respond to the Board's criticism that plaintiffs' statistics do not account for any differences in productivity or academic

merit among faculty members, plaintiffs' expert, Dr.Mary Gray, performed a vita-matching study, set out in Ex. 2782 at 103-111. The study purports to show that among the 43 pairs of men and women who were matched, the men and women have equal publication records, equal prior experience, and equal college-level experience, but that the women receive lower salaries than the men.

The women in the study are all either plaintiffs or class members who testified at trial. The men with whom the women are matched were selected by plaintiffs or class member witnesses. When dealing with a small number of cases such as this, it is critical that the cases studied be a random sample of the population. Furthermore, some of the women were matched with men in departments other than their own. Some

of the women are in departments that plaintiffs excluded from their rebuttal report regression analyses as being outside of the class as it was defined by the court on August 10, 1984. Finally, the vitae used to compare the man and the woman were frequently for different years. For example, in one case the man's vita was prepared in 1975 or 1976 and the woman's in 1983. (Tr. 22,430-431).

The methodological flaws in the vita-matching study diminish the study's probative value to the extent that the court declines to draw any inferences from the study.

Court's Conclusions on Rank

The ultimate issue, then, is the extent to which the statistical and anecdotal evidence taken as a whole indicates that the institutions within

the Oregon State System of Higher Education engage in a pattern or practice of discriminating against women faculty members because of their sex with respect to rank at the time of hiring, promotions, and rank status.

Plaintiffs' regression analysis shows statistically significant differences in the overall rank of men and women at four of the eight institutions, and a statistically significant overall disparity when the results are aggregated systemwide. However, several flaws in plaintiffs' model are apparent. First, the evidence indicates that there are significant differences among departments in the amount of prior experience or years of service at the institution required before a faculty member is promoted to a higher rank. Plaintiffs' model does not

take into account this departmental variation. Second, plaintiffs' highest degree variable does not differentiate between terminal degrees and terminal, non-Ph.D. degrees, yet the evidence indicates that possession of a terminal degree is extremely important in rank decisions. Third, plaintiffs' model does not accurately reflect the way in which rank is actually obtained at the institutions. Finally, the model suffers from all the flaws described at length earlier. Much of plaintiffs' evidence fails to account for differences in qualifications. Hence, plaintiffs' model has minimal probative value.

The Board's statistical evidence more accurately reflects the way rank is obtained in the institutions. The Board's statistical techniques, although mathematically less sophisticated than

plaintiffs' regression analyses, are simple, straightforward, and comprehensible. By analyzing rank issues separately for different departments and for terminal and non-terminal degree groups, the Board's statistics avoid some of the flaws contained in plaintiffs' models.

Plaintiffs' regression models show statistically significant differences in the treatment of men and women with regard to rank at some institutions and in the entire system if the figures are aggregated. The Board's evidence in contrast shows that in the large majority of the cases no statistically significant differences exist. Plaintiffs' computer matching study, when the additional variable of years since highest degree is taken into account, also shows no pattern or

practice of discrimination in rank.

From the statistical evidence taken as a whole, the court cannot say that plaintiffs have met their burden of establishing that discrimination in rank and promotion is the Board's standard operating procedure. Plaintiffs' rank regression analyses suffer from the flaws discussed at length in the Evaluation of Statistical Evidence in Support of the Class Claim. More particularly, plaintiffs' models fail to control for departmental differences in rank and promotion, or for the differences in the way faculty with terminal and non-terminal degrees are treated. The evidence indicates that these factors strongly influence rank and promotion, and that when these factors are taken into account, no statistically significant differences between rank or

promotion rates of men and women remain.

The anecdotal evidence also supports a finding that no pattern or practice of discrimination in rank or promotion exists at the eight institutions. Most of the claims made by named plaintiffs and the anecdotal witnesses involve salary, not rank or promotion. In those cases where rank or promotion is an issue, the evidence indicates that ordinarily rank and promotion determinations are based on collegial evaluations of relevant considerations on an individual-by-individual basis. Two points are important. First, although the decisions on rank and promotion are made on the basis of subjective evaluations of the quality of an individual's relevant qualifications, in most cases, the evidence does not indicate that these

subjective evaluations are being used by decision-makers as a pretext for sex discrimination. The anecdotal evidence simply does not leave the court as factfinder convinced that the allegation made by plaintiffs -- that is, that the subjective evaluation of individual qualifications is a device used as a pretext for a pattern or practice of sex discrimination in rank and promotion decisions --has a basis in fact. Second, the types of considerations that the evidence indicates play a large role in rank and promotion decisions are not included in plaintiffs' regression analysis models.

One issue remains: the propriety of using rank as a variable in other regression studies. Since the court has deter mined that the evidence presented does not indicate that the Board engages

in a pattern or practice of discriminating against women in rank and promotion decisions, plaintiffs' argument that rank should not be included in the regression analysis models must fail unless discrimination in rank occurs on an isolated, sporadic occasion and thus causes rank to be a tainted variable. The court will use rank as a variable in the regression models, but keep in mind that it may be biased by some individual instances of discrimination. Although this is an imperfect course, the alternative is to ignore an objective, quantifiable variable for productivity, that has a great impact on salary level and tenure status.

Rank Footnotes

1. This statement is not entirely accurate unless interaction terms are used in the regression analysis model on

salary to allow for differences in the weight given to variables by disciplines. Plaintiffs do not use interaction terms in their regression analysis model on rank.

2. An ordered logistic regression analysis is used when the dependent variable (that is, the variable the model is attempting to explain, which is rank) is binary or discreet (that is, takes on only two or a limited number of values) rather than continuous (such as salary, which can take on a large number of values).

3. The Board's Financial Administration Standard Operating Manual (FASOM) contains descriptions of the numerical codes used in the Board's personnel data base. The departments having FASOM codes from 100 to 1999 are, generally speaking, regular teaching departments. By excluding other departments from their class definition, plaintiffs have excluded most non-teaching support faculty from the class.

4. The results are:

INSTITUTION	SEX COEFFICIENT	T-VALUE
Instructor v. Higher Ranks		
EOSC	+0.609	0.41
WOSC	-0.449	0.58
SOSC	-0.392	0.90
OIT	+1.290	0.44
Assistant Professor v. Higher Ranks		
EOSC	-0.614	0.82
WOSC	-0.069	0.17

SOSC	+0.071	0.20
OIT	-0.426	0.74
Associate Professor v. Full Professor		
EOSC	-0.691	0.46
WOSC	-0.411	0.96
SOSC	+0.571	1.33
OIT	-2.420	1.00

5. The results are:

INSTITUTION	SEX COEFFICIENT	T-VALUE
Instructor v. Higher Ranks		
U of O	-0.327	1.25
OSU	-0.693	3.07
PSU	-0.359	1.40
OHSU	-0.739	3.00
Assistant Professor v. Higher Ranks		
U of O	-0.518	2.45
OSU	-	-
PSU	-0.472	2.42
OHSU	-0.545	1.95
Associate Professor v. Full Professor		
U of O	-0.746	3.06
OSU	-0.607	2.33
PSU	-0.725	2.92
OHSU	-0.854	2.56

Plaintiffs' model did not produce a value for OSU in the "Assistant Professor v. Higher Ranks" category.

6. Plaintiffs also presented a regression analysis of rank done on what plaintiffs term "defendant's class," data generated by plaintiffs by excluding from their original data base those faculty members listed in the Board's "exclusion lists," (Exs. 8168A-F). In this study plaintiffs not only use their uncorrected

data base, but also the regression model used in Exhibit 1, which uses as variables age at hire, years of service, highest degree (Ph.D. or no Ph.D), years since highest degree, ethnic code, whether or not the highest degree was received after hire, and discipline. Because the Board's exclusion lists related to the Board's corrected data base, certain individuals not in the Board's version of the class could yet remain in plaintiffs' version of "defendant's class." An individual excluded from the Board's data base for some reason prior to the class redefinition would not be on the exclusion lists, and hence would remain in plaintiffs' "defendant's class" but not be in the Board's version of the class. Nevertheless, the results of this regression analysis (Ex. 2812A) are similar to those in corrected Table 4 of plaintiffs' rebuttal report -- mostly negative, not statistically significant sex coefficients at the smaller institutions and negative and sometimes statistically significant sex coefficients at the larger institutions.

7. Given the importance of having a terminal degree on rank placement, and the fact that faculty who possess terminal degrees are treated differently in terms of proceeding through the ranks than faculty who do not possess terminal degrees, an argument can be made that plaintiffs should have run the ordered logistic regression analysis separately for those with terminal degrees and those without terminal degrees.

8. The court does not mean by this hypothetical to make a finding that 6.8 percent of the female faculty members state- wide have in fact suffered discrimination in rank. Differences may be due to non-discriminatory reasons that are unaccounted for by plaintiffs' model, or, by flaws in the model itself.

9. Plaintiffs' "snapshot" regressions also incorporate discriminatory actions taken outside of the relevant time period.

10. With reference to rank at hire, possession of a terminal degree usually changes the "entry level" rank from that of instructor to that of assistant professor. Hence, it is appropriate to study those with terminal degrees and those without terminal degrees separately with respect to rank at hire and promotion, as the two groups are in fact treated differently in most instances at the eight institutions.

11. The results are:

WITH TERMINAL DEGREE

Instit.	Number of Cases	Predicted Correctly %	Errors Favoring M	Errors Favoring F
EOSC	16	93.8	0	1
OIT	8	87.5	0	1
WOSC	11	100.0	0	0
OSU	190	92.6	4	10
SOSC	21	85.7	1	2
U of O	160	93.8	8	2
PSU	78	89.7	5	3

Medical	85	85.9	8	4
Nursing	10	100.0	0	0
Dental	22	86.4	2	1

(Ex. 8186, Table 19). (Footnote 11 continued on the next page.) (Footnote 11 continued)

WITHOUT TERMINAL DEGREE

EOSC	17	88.2	2	0
OIT	43	81.4	2	6
WOSC	26	80.8	3	2
OSU	107	87.9	9	4
SOSC	27	81.5	1	4
U of O	55	92.7	1	3
PSU	64	76.5	4	11
Medical	9	88.8	0	1
Nursing	45	77.8	5	5
Dental	4	100.0	0	0

(Ex. 8186, Table 17).

12. The results are:
PERSONS WITH TERMINAL DEGREES

Model A: (Sex and Years Since Degree)

Institution	Sex Coefficient	Units of St. Dev.
EOSC	+0.145	0.38
OIT	+0.410	1.34
WOSC	-0.280	1.46
OSU	+0.007	0.11
SOSC	-0.003	0.02
U of O	+0.012	0.16
PSU	-0.138	1.04
Medical	-0.066	0.42
Dental	-0.003	0.01

Model B: (Sex, Years with Degree, and

Department Groups)

OSU	+0.059	0.78
U of O	-0.053	0.67
PSU	-0.295	1.96

(Ex. 8186, Table 21A). (Footnote 12 continued on next page.)

(Footnote 12 continued)
PERSONS WITHOUT TERMINAL DEGREES

Model A:	(Sex and Years Since Degree)	
EOSC	-0.599	2.38
OIT	-0.321	1.95
WOSC	-0.068	0.36
OSU	-0.216	2.10
SOSC	+0.021	0.09
U of O	-0.202	1.11
PSU	-0.073	0.53
Medical	-0.275	0.68
Nursing	+0.160	0.26
Dental	+0.500	0.61
Model B:	(Sex, Years with Degree, and Department Groups)	
EOSC	-0.616	2.38
OIT	+0.065	0.23
WOSC	-0.141	0.80
OSU	-0.188	1.69
SOSC	-0.035	0.11
U of O	-0.090	0.69
PSU	-0.024	0.15

(Ex. 8186, Table 21B).

13. Dr.Siskin testified that this "Linear Additive" regression analysis model was not a statistically proper technique to use when the dependent variable is discreet. He also ran a

"step-wise" logistic regression analysis of rank at the time of hiring, which he testified was a more proper statistical technique to use when the dependent variable is discreet. The model also allowed for interaction between years since degree and department. The results (Tables 22A and 22B of Ex. 8186) purport to show that sex is not a statistically significant factor in rank at hire except at the University of Oregon with respect to terminal degree holders. However, the methodology of this regression was not fully comprehensible to the court, and hence it is difficult to evaluate its results.

14. In an "event" or "promotion decision" analysis, each decision to promote or not to promote is counted separately, so that if in the relevant time period an individual was denied a promotion twice and then finally promoted, the tables would report two denials and one approval. In the "person promotion decision" analysis, only the final outcome is counted; that is, the above example would be counted as one approval.

Plaintiffs argue that this study and other studies done by the Board that examine decisions made in the period from 1978-1983 are defective in that some of the decisions to promote women under study were made after the filing of this lawsuit. Plaintiffs argue that the Board may have corrected its discriminatory behavior after the lawsuit was filed, and that for this court to allow the Board to use post-filing data in its studies gives

distorted results. However, an examination of plaintiff's studies, which were usually done year-by-year for each institution, convinces the court that this criticism is not valid. Plaintiff's data generally does not show substantial differences in results of regression analyses done in the years preceding the filing of this lawsuit as compared with the years after the filing of the suit.

15. In their rebuttal report, plaintiffs attempt to show that Dr.Siskin's promotion and tenure data are inaccurate. The material in the rebuttal report covers only Western Oregon State College, and was developed by Dr.Anna Penk "by examining records, files and/or contacting individuals in cases of contradictory information." (Pl. Rebuttal Report Ex. 2782 at 47). However, Dr.Penk never testified with respect to this material, and the experts who did testify about the content of the rebuttal report indicated that they knew nothing about the information in this section. In such circumstances, the court is not prepared to discount the accuracy of Dr.Siskin's data, particularly in light of the testimony of Dr.Fred Ramsey that, in the small number of cases he checked, Dr.Siskin's data was generally more accurate than plaintiffs' computer data base.

16. Given what the evidence shows about the average relevant qualifications of men and women in the Oregon state system, however, this result is to be expected.

Plaintiffs also presented an

analysis of the relative rates of promotions of men and women, using rank changes as indicated by the Board's tapes and minimum year-in-rank criteria to determine "opportunities" for promotion. Exhibit 16 presents the results, which indicate that statistically significant differences in the promotion rates of men and women from assistant professor to associate professor and from associate professor to full professor exist. However, this study does not account for differences in qualifications or disciplines. The study also aggregates the results system-wide without providing institution- by-institution results. Finally, the study was made on the class as defined prior to the August 10, 1984 order, and hence includes research and support faculty. The probative value of this study therefore is negligible.

17. The Portland State University result is perplexing, because testimony indicates that at Portland State University, unlike most other institutions, every faculty member is automatically considered for promotion without the need for nomination by a department. Yet on an "event basis," Portland State University has the largest discrepancy between expected and actual female promotion considerations. Dr.Siskin's results for Portland State University are as follow:

	PERCENT DENIED			
	EVENT BASIS		PERSON BASIS	
RANK PROMOTED TO	M	F	M	F

Full	85.7	89.2	61.2	74.3
Assoc.	66.2	75.0	43.2	55.8
Assis.	63.6	65.7	55.6	40.0

None of the results are statistically significant, even though the number of observations is fairly high. Although women have a slightly lower promotion rate than men, this study does not control for differences in qualifications.

18. Dr.Siskin's results were:

Analysis of Relationship Between Rank Assignment 1979-80 and Years Since Degree: Instructor Versus Higher Ranks Persons With Non-Terminal Degree

Inst.	# of Cases	% Predicted Correctly	Errors Favoring M	F
EOSC	28	92.9	2	0
OIT	105	93.3	1	6
WOSC	50	92.0	4	0
OSU	156	97.4	0	4
SOSC	56	96.4	0	2
U OF O	93	100.0	0	0
PSU	99	92.9	5	2
Medical	12	100.0	0	0
Nursing	53	84.9	3	5
Dental	8	87.5	0	1

(Ex. 8186, Table 62).

Analysis of Relationship Between Rank Assignment 1979-80 and Years Since Degree: Assistant Versus Higher Ranks

Persons With Terminal Degree

Inst.	# of Cases	% Predicted Correctly	Errors Favoring M	Errors Favoring F
EOSC	33	97.0	1	0
OIT	17	76.5	0	4
WOSC	118	89.8	4	8
OSU	833	93.3	21	35
SOSC	133	93.2	4	5
U OF O	566	94.2	14	19
PSU	394	92.6	13	16
Med.	237	85.2	18	17
Nurs.	710	0.0	0	0
Dental	75	85.3	2	9

(Ex. 8186, Table 64).

19. Dr.Siskin's results were:

Average Time in Rank:Promotion to Full Academic Faculty Only

	Male		Female		Units of Standard Deviation	P	Sign
	n	Avg	n	Avg			
All	5	9.0	2	5.0	3.78	0.0	Yes*
TD	5	9.0	2	5.0	3.78	0.01	Yes*
NTD	0	-	0	-	-	-	-
All	12	5.8	1	8.0	0.81	0.44	No
TD	(no females)						
NTD	9	6.0	1	8.0	0.68	0.52	No
All	10	3.7	2	4.5	0.76	0.47	No
TD	8	3.8	2	4.5	0.63	0.55	No
NTD	(no females)						

O U	All	86	7.9	9	8.3	0.44	0.66	No
	TD	83	7.9	7	8.0	0.08	0.94	No
	NTD	3	7.7	2	9.5	0.48	0.67	No
S SC	All	25	8.0	3	9.3	0.90	0.38	No
	TD	24	8.0	1	6.0	1.04	0.31	No
	NTD	1	7.0	2	11.0	0.46	0.73	No
U of O								
	All	41	7.8	2	6.0	0.72	0.48	No
	TD	35	8.0	2	6.0	0.78	0.44	No
	NTD		(no females)					
P U	All	59	6.8	9	8.2	1.05	0.30	No
	TD	46	6.6	6	9.3	1.80	0.08	No
	NTD	13	7.6	3	6.0	0.59	0.57	No
Medical								
	All	22	6.9	7	7.6	0.54	0.59	No
	TD	22	6.9	7	7.6	0.54	0.59	No
	NTD	0	-	0	-	-	-	No
Nursing								
	All	0	-	0	-	-	-	No
	TD	0	-	0	-	-	-	No
	NTD	0	-	0	-	-	-	No
Dental								
	All		(no females)					
	TD		(no females)					
	NTD	0	-	0	-	-	-	-

(*)=favors females

Note: TD = cases possessing terminal degree in application year

NTD = cases not possessing terminal degree in application year

(Tr. 8186, Table 15A).

(Footnote 19 continued on next page.)

tnote 19 continued)

Average Time in Rank: Promotion to Associate Academic Faculty Only

Male		Female		Units of Standard Deviation	P	Sign
	Avg	n	Avg			
6	8.7	1	6.0	0.72	0.51	No
5	8.0	1	6.0	0.54	0.62	No
	(no females)					
15	6.5	1	5.0	0.90	0.38	No
		(no females)				
12	6.4	1	5.0	0.84	0.42	No
23	9.1	8	6.9	1.08	0.29	No
10	4.3	5	5.8	1.06	0.31	No
13	12.8	3	8.7	1.59	0.14	No
112	5.1	15	5.3	0.26	0.79	No
107	5.0	13	5.2	0.43	0.67	No
5	8.4	2	6.0	0.53	0.62	No
10	7.7	8	6.8	0.75	0.47	No
8	7.4	4	5.3	1.61	0.14	No
2	9.0	4	8.3	0.25	0.81	No
0						
53	5.8	21	6.5	1.41	0.26	No
35	5.1	14	6.2	1.66	0.10	No

TD	18	6.9	7	7.0	0.04	0.97	No
J							
1	46	5.6	19	6.0	0.35	0.73	No
TD	35	4.8	9	3.8	0.95	0.35	No
D	11	8.1	10	8.0	0.04	0.97	No
edical							
l	39	5.1	9	5.1	0.09	0.93	No
D	39	5.1	9	5.1	0.09	0.93	No
TD	0	-	0	-	-	-	No
rsing							
l		(no males)					
TD		(no males)					
D	0	-	-	-	-	-	-
ental							
l		(no females)					
		(no females)					
TD		(no females)					

te: TD = cases possessing terminal degree in application year
NTD = cases not possessing terminal degree in application year

x. 8186, Table 15B).

Average Time in Rank: Promotion to Assistant Academic Faculty Only

Male		Female		Units of Standard Deviation	P	Sign
n	Avg	n	Avg			

OSC

1	3.0	2	5.0	0.0	1.00	No
4	4.5	4	4.0	1.00	0.36	No
2	4.0	1	3.0	0.0	1.00	No
1	11.0	4	6.0	1.52	0.23	No

(no females)

0						
1	-	0	-	-	-	No
2	2.01	0	6.2	1.21	0.26	No

cal (no males)

ng (no males)

al						
1	-	0	-	-	-	No

Only cases not possessing terminal degree in application year

8186, Table 15C).

0. Dr. Siskin apparently lost one pair from analysis.

COURT'S ANALYSIS OF SALARY ISSUE

Plaintiffs allege that the institutions within the Oregon State System of Higher Education engage in a pattern or practice of discrimination against women faculty members because of their sex by paying women faculty members less than similarly situated male faculty members. In order to prove this allegation, plaintiffs performed statistical analyses of salary. The Board also performed its own statistical analyses of salary.

Average Salary Comparisons

Plaintiffs first ran average salary comparisons which either failed to control for differences in qualifications or controlled for only one qualification (such as having a Ph.D.) at a time. Although these analyses showed

statistically significant differences between the salaries of men and women, they are of little probative value because they did not control for differences in relevant qualifications.

Regression Analyses of Salary

Plaintiffs then ran regression analyses of salary. Table 1 of plaintiffs' rebuttal report, Ex. 2782, shows the results of plaintiffs' regression analyses of salary on the new class.[1] These regression analyses use data corrected by use of the anomalies program discussed earlier, and the following explanatory variables:

highest degree (Ph.D., M.A., or B.A.)
years since highest degree[2]
age at hire
years of service
whether highest degree was obtained after hire
discipline (in Model 2)[3]

The results, using Model 2B, are set out

in Ex.2782, Table 1, as follows:

INSTITUTION/ YEAR		SEX COFF	T	R^2
EOSC	'78	-.0981	3.20	71.7%
	'79	-.0924	3.00	79.4%
	'80	-.0743	2.25	84.9%
	'81	-.0649	2.34	87.2%
	'82	-.0728	2.10	73.3%
	'83	-.1026	2.89	67.9%
WOSC	'78	-.0486	2.62	78.3%
	'79	-.0493	2.61	76.8%
	'80	-.0753	4.13	78.5%
	'81	-.0484	2.55	77.9%
	'82	-.0549	2.87	78.8%
	'83	-.0783	3.28	71.1%
SOSC	'78	-.0370	1.43	68.6%
	'79	-.0656	2.36	70.0%
	'80	-.0522	2.11	73.7%
	'81	-.0761	3.16	73.6%
	'82	-.0313	1.27	76.5%
	'83	-.0310	1.07	68.4%
UofO	'78	-.1031	6.71	71.4%
	'79	-.0948	6.23	72.0%
	'80	-.0880	5.72	72.1%
	'81	-.0894	5.78	71.4%
	'82	-.0882	5.73	72.6%
	'83	-.0851	4.95	68.8%
OSU	'78	-.1002	5.74	62.7%
	'79	-.0925	5.00	62.6%
	'80	-.1017	6.02	65.2%
	'81	-.0955	5.93	66.5%
	'82	-.0912	5.67	69.5%
	'83	-.0590	3.45	70.5%
PSU	'78	-.0737	4.29	62.7%
	'79	-.0894	5.46	66.4%
	'80	-.0904	5.31	62.4%
	'81	-.0873	5.28	62.7%
	'82	-.0715	4.11	62.5%
	'83	-.0616	3.53	58.3%
OHSU	'78	-.2039	4.39	52.6%
	'79	-.1660	3.56	48.0%
	'80	-.2105	5.63	62.0%
	'81	-.1126	3.16	62.9%
	'82	-.1287	2.63	40.5%
	'83	-.1058	2.63	48.3%
OIT	'78	-.0826	1.94	54.6%
	'79	-.1008	2.41	58.5%
	'80	-.0587	1.33	53.0%
	'81	-.1012	2.61	51.3%
	'82	-.1206	3.06	53.9%
	'83	-.1211	2.81	53.7%

Plaintiffs argue that their regression analyses show a consistent pattern of negative sex coefficients and these negative sex coefficients prove that the Board engages in a pattern or practice of sex discrimination against women faculty members on the basis of salary. The Board makes general and specific criticisms of plaintiffs' regression analyses of salary and presents its own analysis of salary.

Specific Criticisms

The Board first points out that from year to year the people being studied at each institution change very little,

while from year to year there are dramatic fluctuations in the sex coefficients at the individual institutions. For example, the sex coefficients at Oregon Institute of Technology range from -.0587 in 1979-80 to -.1211 in 1982-83; at Oregon Health Sciences University, from -.2105 in 1979-80 to .1058 in 1982-83; at Western Oregon State College, from -.0753 in 1979-80 to .0484 in 1980-81. See infra, p. 2 Court's Analysis of Salary Issue.

Second, the Board points out that there are significant differences in the predictive ability of plaintiffs' model both between institutions and between years at individual institutions.[4] Plaintiffs' model predicts best at the small undergraduate liberal arts or teaching institutions -- Western Oregon State College, Eastern Oregon State

College, and Southern Oregon State College -- where salaries are more likely to be determined by degree and longevity, variables used in plaintiffs' model; plaintiffs' model fits less well at the larger research universities-- University of Oregon and Oregon State University -- where pay decisions are more likely to be determined by individual qualifications or quantity or quality of research, variables not used in plaintiffs' model. The Board contends that plaintiffs' model works least well (and in fact is totally inappropriate) for the two most distinctive institutions -- Oregon Institute of Technology, where the emphasis is most often on practical experience rather than academic credentials; and Oregon Health Sciences University, where the faculty is heterogeneous.

Finally, the Board points out that the sex coefficients as a rule tend to be smaller at the smaller liberal arts institutions and larger at the larger research institutions, but that in any event the plaintiffs' model will produce negative sex coefficients even in a discrimination-free environment due to its inherent structure.

Plaintiffs' regression analyses on salary purport to show that, after the variables in plaintiffs' model have been accounted for, there still exists an unexplained difference in the average salaries of men and women in the range of 2% - 13%; however, there is a major flaw in this model. Plaintiffs have failed to include rank or any other variable for productivity as an explanatory variable in the model. The evidence is overwhelming that rank or productivity

is a very important factor in salary level. While plaintiffs argue that rank is a "tainted" variable and should be excluded from the salary model, the court has above determined that plaintiffs have failed to prove that the Board engages in a pattern or practice of discriminating against women faculty members with respect to promotion or rank. Although isolated instances of discrimination in promotion or rank may well have occurred, this is an insufficient reason for excluding rank as a variable in the salary regressions. The court will keep in mind the likelihood of isolated instances of promotion and rank discrimination in analyzing the salary regression studies using rank as a variable.

The Board's Analysis of Salary

The Board's expert, Dr. Bernard

Siskin, also used regression analyses to study the issue of salary. Dr. Siskin used as variables:

degree (terminal or non-terminal)
years at institution differentiated by whether terminal degree was held durin those years
years with degree prior to hire differentiated by whether the terminal degree was held during those years
rank
time in rank
whether the terminal degree was received after the current year[5]
discipline (in Model 2)

(Ex. 8189, pp. 27, 28).

In addition to using different variables from the variables used by plaintiffs, Dr. Siskin did separate analyses for each of the three schools at the Oregon Health Sciences University. Dr. Siskin also removed from his analyses those individuals who had income from a

private practice of medicine or dentistry as a part of their salaries from the Oregon Health Sciences University because he could not determine what proportion of their total salaries came from the institution and what proportion came from their private practices. Although plaintiffs claim that this procedure results in the removal of only "high paid men," there is insufficient evidence in the record from which this conclusion may be drawn. Of the total faculty in the medical and dental schools, 13.5 percent were removed from the analysis. Of this 13.5 percent, 47 were male and 7 were female. It cannot be determined whether this is disproportionate to the number of women with private practices in the schools, or if these are in fact the highest paid faculty members.

Dr. Siskin ran the results for each year from 1977-78 to 1982-83. The years given here are examples of the results from Ex.8186, Tables 24-30:

INSTITUTION	YEAR	SEX COEFFICIENT	T	R^2
EOSC	78-79	+.024	1.01	90%
	79-80	-.003	0.11	89%
OIT	78-79	-.043	1.30	90%
	79-80	-.050	1.56	84%
WOSC	78-79	-.012	0.66	--
	79-80	-.021	1.19	--
OSU	78-79	-.029	2.00	81%
	79-80	-.046	3.75	83%
SOSC	78-79	-.021	1.34	92%
	79-80	-.030	1.91	91%
U of O	78-79	-.030	2.82	90%
	79-80	-.017	1.52	88%
PSU	78-79	-.007	0.53	85%
	79-80	+.009	0.80	86%
Med.	78-79	-.087	2.73	81%
	79-80	-.055	1.67	79%
Dent.	78-79	-.031	0.38	91%
	79-80	+.053	0.56	93%
Nurs.	78-79	-.048	0.41	80%
	79-80	-.034	0.58	88%

The results for Western Oregon State College were testified to by Dr. Siskin and represent the results after the broadly defined FASOM code departments were broken down into more narrow, traditional departments. Dr. Siskin did not testify as to the R^2 for these results; however, the R^2 figure for the original Western Oregon State College analysis was 83 percent.

Dr. Siskin's regression analyses on salary show no evidence of a statistically significant pattern of salary differences between men and women. In those instances where the regression analysis results did show statistically significant differences between the salaries of men and women, Dr. Siskin performed an "outlier analysis." Because regression is an averaging technique, the sex coefficients

may be strongly influenced by a few extreme cases. To test for this possibility, Dr. Siskin identified through a computer program those individuals whose actual salaries were either two standard deviations above or two standard deviations below their salaries as predicted by the regression model. He then removed these individuals and reran the salary regression. Plaintiffs object to this procedure, claiming that it results in the removal of all high-paid men and all low-paid women. However, the court concludes that the outlier procedure is a proper technique and has probative value. The evidence indicates that the individuals identified as outliers either had errors in their actual salaries on the computer data base, or peculiar, non-sex-related circumstances for the

extremely high or low salaries. Moreover, the issue in this case is whether salary discrimination against women is the "standard operating procedure" of the Board. If the Board can show that the removal of a small number of extreme cases results in the disappearance of statistically significant male-female average salary differences, then this undermines plaintiffs' proof of a pattern or practice of salary discrimination. In fact, removal of a small number of outliers has a remarkable impact on the regression analysis results. For example, for Oregon Institute of Technology in 1980-81, removal of two individuals out of 123 results in a decrease of the sex coefficient from -.065 (t=2.22) to -.046 (t=1.75); at Oregon State University in 1979-80,

removal of 45 individuals out of 949 reduces the sex coefficient from -.046 (t=3.75) to -.025 (t-2.42); at the University of Oregon in 1977-78, removal of 33 individuals out of 651 reduces the sex coefficient from -.027 (t=2.39) to-.018 (t=1.99). Removal of outliers also increases the predictive capability of the model.

Thus, the Board's salary regression studies tend to show that no pattern of statistically significant differences in the average salaries of men and women exist at the institutions after accounting for the variables used in the Board's model.[6] Plaintiffs argue that the consistent pattern of negative sex coefficients in the Board's results is indicative of a pattern or practice of sex discrimination even though those negative sex coefficients are

statistically insignificant. However, the Board's regression model suffers from many of the same flaws as plaintiffs' model -- e.g., the "years since" variables overstate the qualifications of women, and the effects of departmental interaction are not accounted for. The pattern of negative sex coefficients in the Board's results is to be expected given the structure of the model, as it is with plaintiffs' model.

Matching Studies on Salary

Both parties conducted "matching studies" on salary. In a matching study, male-female pairs are matched as to certain qualifications. Unlike a regression analysis, which controls for differences in qualifications through algebraic manipulation, a matched pair study involves examining the employment

results of individuals who actually have the same qualifications. A matching study is easily understood, and it avoids some of the technical difficulties of the regression analysis. However, a much smaller sample of the entire targeted population is studied because not every female has a matched male.[7] Nevertheless, matching studies are important statistical tools.

In plaintiffs' matching study, done for the 1979-80 academic year, 169 male-female pairs are matched on the basis of institution, department, degree, and service year. Plaintiffs controlled for years since highest degree by means of a linear regression. The results of the study indicate that the average female salary in the pairs was $677.25 less than the average male salary, with a t-value of 2.33, and each

extra year of service was on the average worth $361.90.[8]

The Board's expert, Dr. Finis Welch, testified as to what he believed were the flaws in plaintiffs' matched pair study. He testified that data errors affected six pairs. Dr. Welch corrected these. He then eliminated nine pairs in which one or both individuals received the degree upon which they matched after 1979, the year the plaintiffs used as the basis for their study. He also eliminated one pair that was matched on the basis of having no degree information available for each indivi dual. After these changes were made, the average salary difference between men and women was reduced to $643.91 (t=2.19). However, when only those pairs holding equal rank were considered, the salary difference was

only slightly adverse to women (a logarithmic coefficient of -.008) and was not statistically significant (t=0.60). Dr. Welch then noted that 35 pairs should be excluded from plaintiffs' regression analyses because they were support faculty. After removing these pairs, the average difference in the salaries of males and females was $496.55 (t=1.44). When only those pairs having equal rank were considered, the average salary difference is $73.08 (t=0.27).

Dr. Siskin also performed a matching study. Dr. Siskin matched male-female pairs as to institution, department, rank, and time in rank (within two years). Dr. Siskin's study did not control for degree or years of service. At Oregon Institute of Technology, Oregon Health Sciences University, and

Eastern Oregon State College, there were not enough matching pairs to allow an analysis to be done. At Southern Oregon State College, the University of Oregon, and Portland State University, the average salary differences were so small that they were not statistically significant and they sometimes favored women. At Western Oregon State College and Oregon State University, the average salary differences between men and women were larger and sometimes statistically significant. See Ex. 8186, Tables 42-46.

The matching studies generally tend to further undercut the results of plaintiffs' regression analyses on salary. When only those pairs in the class are considered, plaintiffs' matching study does not reveal statistically significant differences in the salaries of men and women faculty

members. Moreover, when only pairs of equal rank are considered, the salary differences between men and women are further reduced. The Board's matching studies on salary similarly indicate that in the large majority of cases no statistically significant differences in the salaries of men and women exist.

It is interesting to note the difference in the magnitude of the sex coefficients in plaintiffs' matching studies and plaintiffs' regression analyses. The logarithmic sex coefficient for plaintiffs' matching study is approximately -.030. See Ex. 8202 at 3. The aggregate sex coefficient for plaintiffs' regression analysis of salary is about -.100. The difference suggests that many of the Board's criticisms of plaintiffs' regression models are valid. The difference may

also give a rough approximation of the magnitude of the change in the sex coefficient caused by the flaws in plaintiffs' regression model. If so, it appears that the flaws result in a substantially larger negative sex coefficient. Similarly, the "per-woman shortfall" -- that is, the amount plaintiffs claim represents how much each woman faculty member was underpaid per year because of sex -- as estimated by plaintiffs' regression technique, is $2,276 for 1979-80. Ex. 2782 at 28. Yet the average male-female salary difference from plaintiffs' matching study is $677.

One final study needs to be examined. Plaintiffs' expert, Dr. Ramsey, did an institution-by-institution regression analysis for 1979-80 in which he attempted to respond

to certain objections made by the Board. In this analysis, Dr. Ramsey added as variables certain interaction terms, which attempt to allow for differences in the average value of explanatory variables in different departments. Dr. Ramsey also added rank as a variable. He added these variables one at a time so that the effect of adding the variable could be seen. The results, found in Table 16 of Ex.2782, are as follows: (1) the addition of interaction terms results in a sex coefficient of a smaller magnitude and increases the predictive ability of the model; 2) the addition of rank to the model results in a substantial increase in the model's predictive capacity; the addition of rank also significantly reduces the sex coefficient; in fact, after interaction terms and rank are included as variables

in this model, the aggregate overall salary disparity between men and women is reduced from 20 percent (with no variables whatsoever in the model) to 2.2 percent; moreover, only at Western Oregon State College does the difference remain statistically significant, although at four other institutions the t-values remain above 1.5.

Court's Conclusions on Salary

The issue, then, is whether the statistical evidence taken as a whole and evaluated in light of the other evidence in this case establishes that the Board engages in a pattern or practice of discriminating against women in salary determinations. The court concludes that it does not, for the following reasons:

1. The regression models used by both of the parties tend to produce

negative sex coefficients as a result of their construction.

2. The Board's treatment of outliers indicates how sensitive regression analyses are to a small number of unusual cases and how misleading averages can be; the outlier analysis undercuts plaintiffs' claim of a pattern or practice of discrimination.

3. The anecdotal evidence does not support a finding of sex discrimination in salary determination.

4. Rank or some other measure of productivity is an essential variable for salary studies. When rank is included as a variable in the regression analysis, male-female salary differences at the institution are no longer statistically significant in a high percentage of cases.

5. Even where the differences

between male-female salaries are statistically significant, these differences do not support a finding of a pattern or practice of discrimination. The differences may indicate isolated or sporadic instances of discrimination or they may be caused by flaws in the statistical methodology.

This court does not wish to imply praise or criticism for the salary determination process at the eight institutions. To the casual observer the salary determination process may appear to be a standardless guessing game, lending itself to discriminatory practices. But to the participants in the process it is a painstaking process by which a monetary sum is allocated to the creative contributions of intellectually gifted individuals.

Salary Footnotes

1. Plaintiffs define the new class as all of those women in the ranks of instructor through full professor who are in departments having FASOM codes between 100-1999 inclusive. This definition removes from the class most of the non-teaching support faculty; however, it leaves in the class an unknown but substantial number of instructors who are excluded from the court's definition of the class. Plaintiffs' rebuttal report regression analyses also place those faculty in such units as the Agricultural Experiment Station at Oregon State University and the Crippled Children's Division at Oregon Health Sciences University into their respective institutions, rather than combining them into an "others" institution as plaintiffs had done in their original studies.

2. See the discussion infra, Evaluations of Statistical Evidence in Support of Class Claim.

3. This variable only controls for differences in average salary in the various departments. It does not control for the effects of interaction.

4. Use of a departmental indicator variable will almost always increase the predictive ability of a model.

5. Dr. Siskin included this variable because the factual evidence indicates that individuals who were hired "ABD" (All But Dissertation) -- that is, having only to complete their dissertation in order to receive a Ph.D. -- were treated more similarly to individuals having a Ph.D. than to those who did not have a Ph.D. and were not working toward a Ph.D.

6. The Board also did a linear additive regression of salary at hire for new hires in the 1978-83 period, using as variables (1) whether the individual had a terminal degree, (2) highest degree, (3) year hired (a control for year-to-year differences in annual starting salaries), (4)department, and (5)rank into which hired. The results show no statistically significant differences between the salary at hire for men and women except at Southern Oregon State College. See Table23, Ex.8186.

7. The possibility exists that the males or females matched in a matching study may not be representative of the entire population in terms of relevant qualifications. The plaintiffs examined

this possibility for tneir matching study and determined that there were no statistically significant differences in qualifications between the 169 females matched in the study and females in the Oregon State System of Higher Education generally. See Ex. 2782 at 82-85.

8. As in the regression analysis, two of the four explanatory variables, years of service and years since degree, measure potential rather than actual relevant experience and may be biased in favor of women. However, it is impossible to determine whether this is in fact the case for the 318 individuals in the matched pair analysis, although it would have been an easier task to compute an "actual-years-of-relevant-experience" value for the small number of individuals in the computer matching study.

9. Running a regression department-by-department rather than institution-by-institution seems to be the better method of controlling for departmental interaction. The R^2 value for the University of Oregon using the interaction terms is 73.0%; the R^2 value for the department-by-department regression is 81.4%. See Table 15, Ex. 2782.

10. A department-by-department study at the University of Oregon indicates that significant differences exist in the sex coefficients in different departments. In many departments the sex coefficient was positive -- even though the regression model itself will produce negative sex

coefficients in a discrimination-free environment. The study undermines plaintiffs' claim that sex discrimination in salary is a pattern or practice that pervades the entire Oregon State System of Higher Education.

COURT'S ANALYSIS OF THE TENURE ISSUE

Plaintiffs allege that the Board engages in a pattern or practice of discriminating against women faculty members because of their sex with respect to tenure status in that women faculty members are systematically denied tenure and "placed" in fixed-term rather than tenure-track positions. The Board contends that tenure decisions are made without regard to sex.

Plaintiffs presented no new statistical studies on tenure after the court's order of August 10, 1984, in which the class was redefined.[1] Plaintiffs' original report on the statistical analyses of tenure is similar in structure to their report on the statistical analyses of rank. Plaintiffs first analyzed all raw averages with regard to tenure, then raw averages for

faculty with Ph.D. degrees and raw averages for faculty without Ph.D. degrees. Although these analyses show male-female disparities, they are simple averages which are not significantly probative of discrimination because they fail to take into account other relevant variables.

Plaintiffs rely primarily on their ordered logistic regression analysis of tenure.[2] This study, however, shows that at most institutions there are no statistically significant differences between the tenure status of men and women. See Ex.20. For example, the results for the 1979-80 academic year are: (See next page)

INSTITUTION	Fixed v. Term (Non-tenue track) B	Tenure Track (Not yet Tenured) T	Fixed v. Term (Non-tenure track) B	Fully Tenured T
EOSC	-3.364	0.33	-1.174	1.29
WOSC	+0.364	0.91	+3.870	0.54
SOSC	+0.168	0.32	+0.306	0.63
U of O	+0.167	0.68	-0.509	3.68
OSU	-0.220	1.65	-0.073	0.51
PSU	-0.294	1.43	-0.327	1.73
OHSU	-0.233	1.33	-0.238	1.28
OIT	-0.469	0.64	-0.067	0.15
OTH	-0.393	2.46	-0.176	1.05

See Ex. 2182A.

See Ex. 2182A.

Plaintiffs employed the same procedure used in the rank analysis to convert these coefficients regarding tenure into a more comprehensible form. The results of this conversion are:

AGGREGATED TENURE STATUS OF WOMEN	Actual	Predicted	(8) Difference
Fixed-term	55.8	44.1	+11.7
(Non-tenure-track)	12.1	10.9	+ 1.2
Tenure-track	32.1	45.0	-12.9
Tenured			

Although the magnitude of the differences when aggregated is substantial, most of the differences at the institutions when studied individually are not statistically significant. Moreover, plaintiffs' tenure regression analysis models the tenure process less well than any other employment factor. Tenure-track, like rank, is position-specific; an individual is ordinarily hired into a position that is denominated fixed-term or tenure-track, rather than first being hired and then being "assigned" a tenure-track or fixed-term designation. More importantly, tenure is ordinarily either granted or denied to those in tenure-track positions after completion

of six years of service. If tenure is not granted, then a faculty member in a tenure-track position is usually terminated after being given one year's notice. Tenure is then a double-edged sword: those in tenure-track positions have the potential for long-term job security, but they also face an "up or out" situation at the end of six years. If a position denominated tenure-track becomes available, often a fixed-term faculty member will be considered for the tenure-track position, with some or all of the fixed-term service time counting towards tenure. This may be negotiated between the faculty member and the institution and varies from person to per son and institution to institution. Hence, the fixed-term/tenure-track line is not hard and fast.

Two facts are clear: first, plaintiffs' regression analysis on tenure fails to adequately model the tenure-status process; the institutions do not, as plaintiffs' model implies, consider the qualifications of all faculty members yearly and then "assign" a tenure status to them.[3] Moreover, plaintiffs' model does not reflect the importance of the sixth-year "up or out" decision. Second, faculty members who are granted tenure have only the prestige and the security of their positions as advantages over non-tenured faculty.[4]

In contrast to plaintiffs' statistical analysis of tenure, the Board's model more accurately reflects the tenure status decision-making process. Dr. Siskin first studied the outcomes of actual tenure decisions made

during the period of 1978-1983, recording a granting of tenure if an individual was granted tenure at any time during the period.[5] The results of this study (Ex. 8186, Table 3) show no statistically significant differences in the tenure denial rates of men and women during the period 1978-1983. Dr. Siskin next studied the actual tenure status of newly hired faculty in the same period. The results (Ex. 8186, Table 4) show that no statistically significant differences exist between newly-hired men and women in assignment to tenure-track or fixed-term positions except at Oregon State University and Portland State University.[6] Dr. Siskin then studied whether the differences at Oregon State University and Portland State University were due to some factor other than sex. He first used rank as an explanatory

factor; his results (Ex. 8186, Table 5) show that for newly hired faculty at Portland State University and Oregon State University who were hired into the ranks of instructor, associate professor, and full professor, there are no statistically significant differences in tenure status. However, at both schools a statistically significant difference remained between men and women hired as assistant professors. Dr. Siskin next studied whether departmental differences might explain this result. He found that in those departments having both men and women faculty members, no pattern of assigning women to fixed-term positions and men to tenure- track positions exists. (Ex.8186, Table 6.) Dr. Siskin's conclusion -- that the apparent sex-related differences at Oregon State University and Portland State University

in the tenure status of newly hired faculty are due to departmental differences[7] -- seems borne out by these studies.

Dr. Siskin also did a "snapshot" regression analysis of tenure status similar to plaintiffs, but with certain modifications that take into account the tenure decision process. First, Dr. Siskin examined whether faculty members with six or more years of service were tenured or not tenured. In this analysis he controlled for rank by running separate analyses for each rank at each institution and thereafter aggregating the results. The results (Ex. 8186, Table 7) show no statistically significant differences in the tenure status of men and women with six or more years of service when rank is used as a variable. Dr. Siskin did a similar study

for faculty with less than six years of service. The results (Ex. 8186, Table 8) show that only at Oregon State University are there statistically significant differences in the proportion of men and women in fixed-term and tenure-track positions. Given the results of the department-by- department study done earlier, this result, which does not take discipline into account, is not surprising.

Plaintiffs also studied tenure status as a part of their computer matching study discussed earlier. Of the 169 pairs matched by plaintiffs, in 138 cases the tenure status of the man and the woman was the same. Among those pairs in which the tenure status differed, in 21 cases the man had the higher tenure status, and in 10 cases

the woman had the higher tenure status.[8]

After evaluating the statistical evidence relating to tenure, the court concludes that plaintiffs have not met their burden of establishing that the Board engages in a pattern or practice of sex discrimination with respect to tenure status. The reasons are as follows: First, plaintiffs' ordered logistic regression analysis does not show statistically significant male-female differences at most institutions. To the extent that plaintiffs' ordered logistic regression analysis shows differences adverse to women, the differences are overstated due to the flaws in plaintiffs' model discussed earlier and, specifically with regard to tenure, due to the fact that plaintiffs'

model poorly reflects the actual process of tenure decisions.[9]

Finally, even were the court to consider plaintiffs' matching study to be a perfect one, the results from that study are simply not indicative of a pattern or practice of sex discrimination in tenure status that pervades the entire Oregon State System of Higher Education. At most, plaintiffs' statistics on tenure reflect the existence of isolated or sporadic instances of discrimination against women in tenure status.

Most importantly, the anecdotal evidence does not support plaintiffs' allegations. The evidence indicates that tenure decisions are very important to the institutions -- and for very good reasons: a grant of tenure commits the institution to a life-long personal and

financial relationship with a faculty member. The evidence indicates that in general tenure decisions are made with great care, and are based on considerations unrelated to the sex of the faculty member under consideration. Much of the tenure evaluation process is subjective. However, the court is not convinced that this subjective tenure evaluation process leads to a pattern or practice of adverse treatment of women because of their sex.

Tenure Footnotes

1. After the August 10, 1984 order in which the class was redefined, the court allowed plaintiffs to introduce new, case-in-chief studies on the newly redefined class as a part of their "rebuttal report" prior to the presentation by the Board of its statistical evidence. Plaintiffs did not do this. Rather, plaintiffs offered into evidence the tenure regression analysis of the newly defined class as "rebuttal" evidence after defendant had presented its statistical evidence. The court excluded this evidence because it does not rebut the Board's interpretation of the new class, nor does it rebut the Board's methodolodgy. There is no reason why plaintiffs could not have presented the new tenure study during the time allotted to them by the court for presentation of new case-in-chief studies on the newly defined class. Even were the evidence admitted, however, the court's determination of the tenure matter would not change.

2. The ordered logistic regression procedure, and the meaning of the coefficients, is explained supra at . This study uses Model 1A, which does not account for differing proportions of tenure status in different departments.

3. The plaintiffs' regression analysis of tenure also suffers from the possibility that it reflects the effect of pre-statute of limitations period decisions that are no longer actionable in this case. See the discussion supra

at .

4. Plaintiffs' regression analysis also suffers from the general flaws discussed earlier. Also, the class analyzed by plaintiffs in this regression includes research assistants and research associates, who are not ordinarily eligible for tenure. This may skew plaintiffs' results, because although research assistants and associates may have high "years since" variable values, they will be in fixed-term positions.

5. Hence, if a faculty member was denied tenure one year and granted tenure the next, the individual would be recorded under "tenure granted."

6. In these studies no differences in qualifications were taken into account.

7. Plaintiffs' logistic regression analysis of tenure does not account for any departmental differences in tenure status.

8. Plaintiffs also did a classification analysis of tenure status. See Ex. 1 at 18a; Ex. 1A (errata for table). The classification analysis produced results similar to those produced by the ordered logistic regression analysis, and is subject to similar criticisms. See the discussion supra at .

COURT'S ANALYSIS OF THE ADMINISTRATIVE RESPONSIBILITY ISSUE

Plaintiffs allege that the Board engages in a pattern or practice of discriminating against women faculty members because of sex by denying them advancement into positions of administrative responsibility.

The only statistical evidence that plaintiffs offered to prove this claim was contained in Higher Education General Information Survey (HEGIS) reports along with information found in the catalogs of the various institutions, tabulated in Exhibits 3772-U and 2069A. These exhibits examine the distribution of men and women in administrative positions at the eight institutions. Ex. 2069A was created by Dr. Roberta Hall from information contained in catalogs for the 1983-84 academic year. It shows the

following distribution:

POSITION	NUMBER OF MEN	NUMBER OF WOMEN
President	8	0
Vice President	9	1
Asst. to President	2	6
Dean or Director	190	30

Ex. 3772-U was prepared by Dr. Madronna Holden from information contained in HEGIS reports for the academic years 1972-73 and 1976-77 and catalogs for the academic year 1980-81. It shows the following distributions:

POSITION	YEAR	NUMBER OF MEN	NUMBER OF WOMEN
President	72-73	7	0
	76-77	8	0
	80-81	8	0
Vice Pres./ Provost	72-73	33	0
	76-77	40	4
	80-81	14	1
Dean/ Assoc. Dean	72-73	26	2
	76-77	45	5
	80-81	72	13

Apart from limited anecdotal evidence, this is all of the evidence presented by plaintiffs in support of their

administrative responsibility claim.

This evidence is insufficient to establish that the Board engages in a pattern or practice of denying positions of administrative responsibility to women. The evidence establishes that few women are in administrative positions; the evidence does not establish, however, that the male-female distribution in these positions is disproportionate to the male-female distribution in the pool of faculty qualified for such positions.

Statistics showing an apparent underrepresentation of females in an employment category are of little or no evidentiary weight on the issue of sex discrimination without a showing of the proportion of females in the pool of applicants qualified for the position. See Hazelwood School District v. United

States, 433 U.S. 299, 308 (1977); White v. Washington Public Power Supply System, 692 F.2d 1286, 1289 (9th Cir. 1982); Hagans v. Andrus, 651 F.2d 622, 627 (9th Cir. 1981), cert denied 454 U.S. 859 (1982) (evidence of a low percentage of women in a position "is meaningless without evidence that there existed somewhere a pool of women applicants qualified to assume [the position]."); Pack v. Energy Research & Development Corp., 566 F.2d 1111, 1113 (9th Cir. 1977). The court cannot draw an inference from the evidence presented by plaintiffs that the Board engages in a pattern or practice of denying positions of administrative responsibility to qualified women because of their sex. Plaintiffs cannot prevail on this portion of their class claim.

CONCLUSION

Named Plaintiffs' Claims

Twenty-two named plaintiffs presented 58 individual claims of sex discrimination in conditions of employment while employed by the Oregon State Board of Higher Education. Of the 58 claims presented, the court determined that an inference of sex discrimination could be drawn in three of those claims, and thereafter found for the plaintiffs on those three claims.

Dr. Joanne Amspoker prevailed on the only claim she made, a salary claim. Dr. Anna Penk prevailed on one of her four claims, a promotion claim. Dr. Mary Ann Petry prevailed on one of her three claims, a tenure claim. All three women are from Western Oregon State College.

The named plaintiffs' individual claims do not provide any basis for this

court to conclude that the Oregon State Board of Higher Education engages in a pattern or practice of sex discrimination. The named plaintiffs' individual claims do not bolster the statistics which form the basis of the class action claim.

Why did so few named plaintiffs prevail on so few claims? First, the named plaintiffs presented very little direct evidence of sex discrimination. Compare International Brotherhood of Teamsters v. United States, 431 U.S. at 338, n.19, quoted infra, Intro. - Class Claim, p. 4. Second, discriminatory acts prior to 1972, when Title VII became applicable to the Oregon State Board of Higher Education, are not actionable unless they constitute a continuing violation. The continuing effects of specific, time-barred discriminatory acts

will forever go uncompensated. Third, Title VII is of no avail to those plaintiffs who made comparable worth claims without more. See, e.g., Polly Fisher, Sherry Mihel, Betty Leonard. Some plaintiffs did not adequately explain the basis of their claim. See, e.g., Margaret Lumpkin's retirement claim. Some plaintiffs felt that if they were competent to fill a position, they need not be qualified to fill the position. See, e.g., Diana Kale's claim that a Ph.D. degree was not necessary. Some plaintiffs mistook the consequences of financial disasters and budget cuts for sex discrimination. See, e.g., Carol Rathe and Barbara Stewart. Some plaintiffs were simply undeserving of better pay, promotion, or other employment benefit.

In each plaintiff's case in chief, she testified on her own behalf about unsatisfactory and unexplainable differences in treatment between her and a male comparator or comparators. In each plaintiff's case, the plaintiff's individual testimony was sufficient to require the Oregon State Board of Higher Education to articulate legitimate, non-discriminatory reasons for the claimed discriminatory treatment. Had the Oregon State Board of Higher Education not come forward with legitimate, non-discriminatory reasons for the treatment complained of by each plaintiff, a majority of the plaintiffs would have prevailed under the McDonnell Douglas scheme discussed Infra, Law Applicable to Named Plaintiffs' Cases. The Oregon State Board of Higher Education not only responded to each of the plaintiffs'

claims, it responded with a storm of explanation. The Board's response was time-consuming, but appropriate in the context of the charges made against it and the law which applied to it. The Board offered nondiscriminatory reasons for each action complained of by the plaintiffs. The Board's explanations for plaintiffs' perceived discriminatory treatment included budget considerations, market competition, quality and quantity of performance, academic qualifications, prior experiences, length of service, and explanations for simple misunderstandings.

Considering the quality and quantity of the Board's explanations, each plaintiff should have come forward with evidence to show that the reasons offered by the Board were a pretext for sex discrimination. In order to carry their

ultimate burden of persuasion, plaintiffs had to show that the Board's explanations were offered to conceal the Board's true purpose of sex discrimination. This portion of the plaintiffs' individual cases was entirely inadequate. Plaintiffs offered almost no evidence to impeach the Board's explanations of the allegedly illegal employment conditions. Without rebuttal testimony to establish that the Board's reasons were a pretext for sex discrimination, the named plaintiffs' individual cases, in most instances, had to fail.

While the McDonnell Douglas scheme is not ritualistic, and while the court was free to decide whether the Board inten tionally discriminated against the plaintiffs based upon all of the evidence before it, the case in chief presented by

each plaintiff was, for the most part, weak; and the rebuttal case presented by each plaintiff was, for the most part, nonexistent.

In most cases, only the named plaintiff testified in support of her individual claim, and her testimony rarely did more than describe differences in employment conditions. Plaintiffs' counsel in his letter of February 4, 1985, states as follows:

The court has made three requests of me.

1. To list the names of witnesses, other than plaintiffs, who testified in support of the individual cases of each of the plaintiffs.

It is our legal position that all of the plain tiff's evidence which establishes a pattern of sex discrimination is relevant to the case of each indivi dual plaintiff. In addition, Dr. Fay Haisley testified in support of the individual case of Dr. Ruth Waugh. Erhard Dortmund testified about subjectivity in decision making at Oregon College of Education, now known as

Western Oregon State College, and this testimony would apply to the individual claims of Dr. Anna Penk, Dr. Joanne Amspoker, and Dr. Mary Ann Petry although Mr.Dortmund did not mention these plaintiffs in his testimony. The testimony of Donna Schantz, Dr. Florence Hardesty, and Dr. Linda Kaeser supported the testimony of plaintiff Polly Ann Fisher, although those witnesses did not mention Ms.Fisher in their testimony. June Dunn's testimony related to the case of plaintiff Betty Leonard, as well as to her own claim of discrimination. The deposition of James Lockwood dealing with the depressed salaries for women librarians was helpful in support of the cases of plaintiffs Sherry Mihel and Lois Schreiner, although Mr.Lockwood did not mention either of the named plaintiffs in his testimony. The testimony of Dr. Darlene Southworth which dealt with subjectivity in decision making at Southern Oregon State College was helpful to the cases of plaintiffs Sherry Mihel and Rosemary Dalton, although Dr. Southworth did not mention either of the named plaintiffs in her testimony. The testimony of Dr. Frances Storrs about subjectivity in decision making at Oregon Health Sciences University was helpful in the cases of Dr. Jane Siegel and Ann Hoffstetter, although Dr. Storrs made no mention of Dr. Siegel in her testimony. (Emphasis added.)

In 55 out of the 58 instances of claimed sex discrimination, the Board adequately accounted for the employment

conditions complained about or adequately refuted the fact that the condition occurred at all. The evidence, taken as a whole or applied mechanically within the McDonnell Douglas scheme, fell short. To prevail on a claim of a systemwide pattern or practice of disparate treatment, a plaintiff must prove an intentional discriminatory motive or animus or must present evidence from which a court may infer an intentional discriminatory motive or animus on the part of a defendant. Plaintiffs' theory of liability as to the Oregon State Board of Higher Education in this case is that the Board did nothing in the face of persistent and overwhelming evidence that discrimination against women is commonplace at the institutions. There are three prongs to plaintiffs' theory:

(1) discrimination against women is commonplace at the institutions; (2) the Board knows this; and (3) the Board took little or no action to address the problem of sex discrimination. Therefore, plaintiffs argue, the court may infer that the Board's inaction was the result of a discriminatory motive or animus.

Plaintiffs' theory fails because they have not proved that discrimination against women is commonplace at the various institutions. No pattern or practice of sex discrimination exists of which the Board should have been aware.

As a matter of official policy, the Board requires that faculty members be treated equally, without regard to sex. The Board requires and supports a policy of nondiscrimination and affirmative action at each institution. The Board

itself and each institution has an affirmative action or compliance officer to oversee implementation of the Board's policies of nondiscrimination and affirmative action. While plaintiffs contend that the affirmative action officers are powerless figureheads, mere window dressing in a storehouse of wholesale discrimination, with one notable exception, the court was impressed with the attitude, sincerity, and diligence of the affirmative action officers in the Oregon State System of Higher Education. Although affirmative action officers are not given the power to overturn employment decisions, they set up and monitor procedures whereby sex discrimination is less likely to occur.

There was some anecdotal evidence of discriminatory statements by a Board

member and of insensitivity to the issues of women in the Chancellor's office. This evidence is not sufficient to support a finding that the Board refuses to act against sex discrimination because of a discriminatory motive. Furthermore, a distinction must be made between the concepts of "nondiscrimination" and "affirmative action." Nondiscrimination is the mandate of Title VII, a Congressional Act, and is the law of the land; affirmative action is a statement of executive policy and is to some degree permissive. Plaintiffs claim that the Board's failure to embrace affirmative action to their satisfaction indicates a discriminatory motive. While insensitivity and inaction may be indicative of discriminatory animus, the evidence does not support a finding of

discriminatory animus in this case. Whatever the differences in employment conditions between men and women in the Oregon State System of Higher Education, they have been explained by the Board on legitimate, nondiscriminatory reasons, except in three instances.

Statistics

Plaintiffs' regression analyses are flawed, and the effect of the flaws in the models is that the regression analyses produce unwarranted negative sex coefficients. This means that the statistical results will show apparent differences in treatment adverse to women even in a discrimination-free environment.

The magnitude of the change in the sex coefficients caused by such flaws is difficult to determine precisely, but is, in any event, significant. This is

demonstrated by plaintiffs' own evidence. Whenever plaintiffs improved their regression analysis models in response to a criticism by the Board, the sex coefficients in the improved models were always reduced, often significantly. Plaintiffs' computer matching study, which avoids some, but not all, of the methodological problems of the regression analysis technique, generated sex coefficients substantially less negative than those generated by plaintiffs' regression models.

The Board capitalized upon the weaknesses in the plaintiffs' statistical evidence to create serious doubts as to what the numbers actually prove. To the extent that the statistical evidence shows any overall differences in male-female treatment, the differences are of such a small magnitude that the court

concludes the plaintiffs' statistical evidence cannot support a finding of a pattern or practice of discriminatory treatment of women throughout the Oregon State System of Higher Education. These differences, if they occur, more probably reflect isolated or sporadic instances of sex discrimination. In light of the court's rulings regarding the named plaintiffs' individual cases and the statistical evidence in the class action claim, the court need not address the class member witnesses' testimony.

The tragedy of this case is that it has taken nearly five years, including nine months of trial, to resolve disputes which should have been resolved more rapidly and readily and with less cost in grievance procedures and administrative hearings.

Counsel shall prepare the

appropriate orders to conform to the court's opinion.

The foregoing opinion constitutes findings of fact and conclusions of law in accordance with Fed. R. Civ. P.52(a).

DATED this 13th day of February, 1985.

Helen J. Frye
United States District Judge